591508035Seqlist.txt SEQUENCE LISTING

<110> KURODA, Masaharu
<120> Plant with Reduced Protein Content in Seed, Method of Constructing the Same and Method of Using the Same
<130> 59150-8035
<140> US 10/539,992 <151> 2003-12-09
<150> PCT/JP2003/015753 <151> 2003-12-09
<150> JP 2002-369700 <151> 2002-12-20
<160> 119
<170> PatentIn version 3.3
<210> 1 <211> 617 <212> DNA <213> Oryza sativa
<220> <223> 13kD prolamine RM9
<400> 1 graaaagcat aagaactaga aacccacca aatgaagatc attitcttct ttgctctcct fyctattgct gcatgcagtg cctctgcgca gtttgatgct gttactcaag tttacaggca atatcagctg cagccgcatc tcatgctgca gcacacgatg cttagcccat gcggtgagtt 188ccgtaaggcag cagtgcagca cagtggcaac ccccttcttc caatcaccgt gtttcaactc 24cgagaaactgc caggctagtg ctgccacacg ctcaggcatga gctcacacga gttgctagcg caggcagta agtgctag ggctaatg gcgtaacaca 30cgtttgctagc ggctaatta gcagtgttca ggctatgtg agcagcatg ggctaacaca 36cgttgctagc atatgcgggtg tctacccaa gctagcacaca atgctggtga atatggtgat tctacccaag ctacacact gctcctgta ggattccaccac 3cdgctggtgg atcaggtgat gaattgtagc agtatagtag tacaggagag aaaaataaag 54caggctgat ctggtgag acaggtgaac agtatagtag tacaggagag aaaaataaag 54catgcaag tttaacac tcggtgtgtga caagttgaaa catcggggtg atacaacaat ggataaaaaaa 54catgcaag tttaaac
<210> 2 <211> 156 <212> PRT <213> Oryza sativa
<220> <223> 13kD prolamine RM9
<400> 2 Met Lys Ile Ile Phe Phe Phe Ala Leu Leu Ala Ile Ala Ala Cys Ser 10 10 11 15 Ala Ser Ala Gln Phe Asp Ala Val Thr Gln Val Tyr Arg Gln Tyr Gln 20 Leu Gln Pro His Leu Met Leu Gln Gln Gln Met Leu Ser Pro Cys Gly 35 40 45 47
Glu Phe Val Arg Gln Gln Cys Ser Thr Val Ala Thr Pro Phe Phe Gln 50 55 60
Ser Pro Val Phe Gln Leu Arg Asn Cys Gln Val Met Gln Gln Gln Cys 65 70 75 80 65 75 80
Cys Gln Gln Leu Arg Met Ile Ala Gln Gln Ser His Cys Gln Ala Ile Page 1

```
591508035Seqlist.txt
```

120

180 240 300

360

420 480

540 600

601

<210> 3 <211> 601 <212> DNA

<213> Oryza sativa

<220> <223> 13kD prolamine RM1

<400D. 3 aggaagcata gtagtagaat cctacaaaaa tgaagatcat tttcgtattt gctctcttg ctattgttgc atgcaacget tctgcacggt trgatgctct tagtcaagt tatagacaat atcaacttaa atcgcatct cctgctacagc acaagtgct cagccatgc agtgagttcg taaggcaaca gcatagcata gtgcaaccc ccttctggca accagctacg tttcaattga taaaccaacca agtcatgag caacagtgtt gccaacaggt caggctggta gcgaacaat cccaaccaca ggccattagt gcaggttggg gattggca gcactacag ttgcaacaat tcggtgttgt ctacttgat aggttcagg cgattggca gcattacag ctgcagcag tggtgtgtgt ctacttgat aggttcaag caacttgc tcgggggg attccacacg tgcatccat atgtggtatc tatcctaact actacattgc tcggaggg attccacacg ttggtgtgtgt ctggtatcga attgaacag taataggtt aaatgtta aaataaggtt atgcatcat atgcgtgaca gttgaaactt gatgtcatat aaatcttaaat aaactcagtc

<210> 4 <211> 156 <212> PRT <213> Oryza sativa

<220> <223> 13kD prolamine RM1

<400.5</p>
4
Met Lys Ile Ile Phe Val Phe Ala Leu Leu Ala Ile Val Ala Cys Asn 10
Ala Ser Ala Arg Phe Asp Ala Leu Ser Gln Ser Tyr Arg Gln Tyr Gln 20
Leu Gln Ser His Leu Leu Leu Gln Gln Gln Val Leu Ser Pro Cys Ser 40
Glu Phe Val Arg Gln Gln His Ser Ile Val Ala Thr Pro Phe Trp Gln 50
55
Glu Phe Val Arg Gln Gln His Ser Ile Val Ala Thr Pro Phe Trp Gln 60
50
Cys Gln Gln Leu Arg Leu Val Ala Gln Gln Ser His Tyr Gln Ala Ile Ser Ser Val Gln Ala Ile Val Gln Gln Leu Gln Gln Leu Gln Gln Val Gly Val Tyr Phe Asp Gln Thr Gln Ala Gln Gln Leu Gln Gln Val Gly Val Tyr Pho Asp Gln Thr Gla Ala Gln Ala Gln Ala Gln Ala Leu Leu Ala 120
Leu Asn Leu Pro Ser Ile Cys Gly Ile Tyr Pro Asn Tyr Tyr Ile Ala 130
Pro Arg Ser Ile Pro Thr Val Gly Gly Val Tyr Fry Ile Ala 150

<210> 5 <211> 766

```
591508035Seqlist.txt
<212> DNA
<213> Oryza sativa
<220>
<223> 13kD prolamine
<400> 5
                                                                                       60
ttgcttcttc ccgtcctccc cgcttgggct cttgggcgcc cgttccgggc gccccctccc
tečtecetce geggtacceg gčegečtčae tectčtgčtg gáccecegge čgececeggge
                                                                                      180
cgcgccccat cccggtgcgc gacccatcgt tcacacagtt caagcattat acagaaaaa
                                                                                      240
agaaagatet agtgteeege ageaatgaag ateatttteg tetttgetet eettgetatt
gčtgcătgca ggcčtctgčc gägtttgatg tttttaggtč aaagttatag gcaatatcag
                                                                                      300
čtyčagtčgc čtytcctýct ácagcaácag gtycttagcc catataatga gttcgtaagg
cagcagtatg gctatagcygc aagcccctt
aaccaagtct ggcaacatca gyctygtyc caacaatctg ctatcagga cattaacatt
                                                                                      360
                                                                                      420
                                                                                      480
gttcaggcca tagcgtacga gctacaactc cagcaatttg gtgatctcta ctttgatcgg
aatcaggctc aagctcaagc tctattggct tttaacgtgc catctagata tggtatctac
                                                                                      540
                                                                                      600
cctaggtact atggtgcacc cagtaccatt accacccttg gcggtgtctt gtaatgtgtt
                                                                                      660
                                                                                      720
ttaacagtat agtiggitegg aagttaaaaa taageteaga tatcateata igtgacaigt
                                                                                      766
gaaactttgg gtgatataaa tagaaataaa gttgcctttc atattt
<210>
        149
<211>
<212>
        PRT
<213>
```

Oryza sativa <220> <223> 13kD prolamine

<400> 6 Met Lys Ile Ile Phe Val Phe Ala Leu Leu Ala Ile Ala Ala Cys Arg Pro Leu Pro Ser Leu Met Phe Leu Gly Gln Ser Tyr Arg Gln Tyr Gln 20 25 30Leu Gln Ser Pro Val Leu Leu Gln Gln Gln Val Leu Ser Pro Tyr Asn 35 40 45 Glu Phe Val Arg Gln Gln Tyr Gly Ile Ala Ala Ser Pro Phe Leu Gln 50 60Ser Ala Ala Phe Gln Leu Arg Asn Asn Gln Val Trp Gln His Gln Ala 65 70 75 80 Gly Gly Gln Gln Ser Arg Tyr Gln Asp Ile Asn Ile Val Gln Ala Île 85 90 95 Ala Tyr Glu Leu Gln Leu Gln Gln Phe Gly Asp Leu Tyr Phe Asp Arg 105 Asn Gln Ala Gln Ala Gln Ala Leu Leu Ala Phe Asn Val Pro Ser Arg 120 125 Tyr Gly Île Tyr Pro Arg Tyr Tyr Gly Ala Pro Ser Thr Ile Thr Thr 130 135 140 Leu Gly Gly Val Leu 145

<210> 717 <211> <212> DNA <213> Oryza sativa

<220> <223> 13kD prolamine

<400> 7 gttccgggcg ccccctccc tcctccctcc gcggtacccg gccgcctcac tcctctgctg gacccccggc cgccccgggc cgcgccccat cccggtgcgc gccccatcgt tcacacagtt caagtattat acagaaaaat agaaagatct agtgtcccgc agcaatgaag atcattttcg

```
591508035Seqlist.txt
tetttgetet eettgetatt getgeatgea gegeetetge geagtttgat gitttaggae
                                                                                    240
aaagtťatag gcaaťatcag čtgčagtčgc čtgtcctgčt ácagcaacag gtgcttágcc
                                                                                    300
catătaatgă gttcgtaagg cagcagtatg gcătagcggc aagccccttc ttgcaatcag
ctgcatttca actgagaaac aaccaagtct ggcaacagct cgcgctggtg gcgcaacaat
                                                                                    360
                                                                                    420
                                                                                    480
ctčactatca ggačattaac attgttčagg ččatagcýca gčaýctáčaá čtčcagcagt
ttggtgatct čťactttgat cggaatctgg ctcaagcťca gttggctttt aacgtgccat
                                                                                    540
ctagatatgg tatctaccct aggtactatg gtgcacccag taccattacc acccttggcg
                                                                                    600
gtgťcttgťa atgtgtttta ačaaggtata gtggttcgga agttaaaaat aagctcagať
                                                                                    660
atcatcatat gtgacatgtg aaactttggg tgatataaat agaaataaag ttgtctt
                                                                                    717
<210>
<211> 148
<212> PRT
<213> Oryza sativa
<220>
<223> 13kD prolamine
<400> 8
Met Lys Ile Ile Phe Val Phe Ala Leu Leu Ala Ile Ala Ala Cys Ser
1 10 15
Ala Ser Ala Gln Phe Asp Val Leu Gly Gln Ser Tyr Arg Gln Tyr Gln
20 25 30
Leu Gln Ser Pro Val Leu Leu Gln Gln Gln Val Leu Ser Pro Tyr Asn 35 40 45 Glu Phe Val Arg Gln Gln Tyr Gly Ile Ala Ala Ser Pro Phe Leu Gln 50 60
Ser Ala Ala Phe Gln Leu Arg Asn Asn Gln Val Trp Gln Gln Leu Ala
65 70 75 80
Leu Val Ala Gln Gln Ser His Tyr Gln Asp Ile Asn Ile Val Gln Ala
85 90 95
Ile Ala Gln Gln Leu Gln Leu Gln Phe Gly Asp Leu Tyr Phe Asp
100 105
Arg Asn Leu Ala Gln Ala Gln Leu Ala Phe Asn Val Pro Ser Arg Tyr
115 120 125
Gly Ile Tyr Pro Arg Tyr Tyr Gly Ala Pro Ser Thr Ile Thr Thr Leu
130 135 140
Gly Gly Val Leu
<210> 9
<211> 650
<212> DNA
<213> Oryza sativa
<220>
<223> 13kD prolamine
<400> 9
cttccccgtc gggcccggcc ccggccctcg cctatccgcc tcctccccc gcgcccttca
ccactcccaa cccagctccc tttctccacc taccggcccc atccttctca caactcaaac
                                                                                    120
attacagcga aagcataaca actagaatcc taccacaatg aagatcattt tcttctttgc
                                                                                    180
tctccttgct gaagctgcat gtagcgcctc tgcgcagttt gatgctgtta ctcaagttta
                                                                                    240
                                                                                    300
caggcaatat cagctgcagc aacagatgct tagcccatgc ggtgagttcg taaggcagca
qtqcaqcaca qtqqcaaccc ccttcttcca atcacccqtq tttcaactqa qaaactqcca
                                                                                    360
agtcatgcag cagcagtgct gccaacagct caggatgatc gcgcaacagt ctcactgcca
                                                                                    420
ggccattagc agtgttcagg cgattgtgca gcagctacag ctacaacagt tttctggcgt
                                                                                    480
čťacttogát cággottoaág cťoaagočoa ágoťatgttg ggootaaačt tgoogťoaát
atgoggtato tacocaagot acaacactgt cootgagatt cotacogtog giggiatotg
                                                                                    540
                                                                                    600
                                                                                    650
gtactgattg acgagataga gacagggaaa taagcatgat catcggggct
```

<210> 10 <211> 149

- <212> PRT <213> Oryza sativa
- <220> <223> 13kD prolamine

Ala Gln Ala Gln Ala Gln Ala Met Leu Gly Leu Asn Leu Pro Ser Ile 115 120 125

Cys Gly Ile Tyr Pro Ser Tyr Asn Thr Val Pro Glu Ile Pro Thr Val 130 135 Gly Gly Ile Trp Tyr 145

<210> 11

<211> 629 <212> DNA <213> Orvza sativa

<220> <223> 13kD prolamine

<400> 11
cyttgaagca tagtagtaga atcctacaaa aatgaagatc attttcgtat ttgctctct tgctattgtt gcatgcaacg cttctgcacg gtttgatgct cttagtcaaa gttatagaca atatcaacta caatgcaatc tccagctaca gcaaccaagtg ctcagccat gcagtgagtt cgtaaggcaa cagcatagca tagtggcaac cccttctgg caaccagcta cgtttcaatt gataaacaac caagtcatgc agcaacagt tytgccaacag ctcaggctgg tagcgcaaca atctacatac caggccatta gtagcgttca ggcgattgt gaccaacagtcactactac caggccatta gtagcgttca ggcgattgt gaccaacagtcactactactac atatgtggta tctactataca agctcaagta cagcttttgc tggccttaaa cttgccatca atatgtggta tctatcctaa ctactacatt gctcgagga gcattccac cttggtggty tctggtactg aattgtaata gtataatggt tcaaagttta aaaataaagt catgcatcat catgcgtga gatggaaca atctacaatt gctcacacca cagctagag atgcataca cagctagaga cagcattcaca catgctagtgty tctggtactg aattgtaata gtataatggt tcaaatgtaa ataaaacacc tatttaaata gcaaaaaaaa aaaaaaaacac

<210> 12 <211> 158 <212> PRT <213> Oryza sativa <220> <223> 13kD prolamine

<400> 12
Met Lys Ile Ile Phe Val Phe Ala Leu Leu Ala Ile Val Ala Cys Asn 1
10
Ala Ser Ala Arg Phe Asp Ala Leu Ser Gln Ser Tyr Arg Gln Tyr Gln 25
20
Leu Gln Ser His Leu Gln Leu Gln Gln Gln Val Leu Ser Pro Cys Ser Page 5

60

180 240

300

600 603

<210> 13 <211> 603 <212> DNA

<213> Oryza sativa

<220> <223> 13kD prolamine

<400> 13
gaagcatagt agtagaatcc aacaacaatg aagatcattt tcgtatttgc tctccttgct attgittgcat gcaatcgctc tgcgcggttt gatcctctta gtcaaagta taggcaatat caactacagt gcgactcctc attgacaa caagtagtca gcaattgcag taggcatagt aggcaacagt atagcatagt ggcaacccc tcttggcaac cagctacgtt tcaattggat aacaaccaag tcatgcagca gcagtgtpc caacagctca ggctggtagc acaacaatct cactaccagg ccattagtat tgtcaagg attggcaac agctaccact gctggagtagt actgcagact cagtgcgact cactgcacaacagt cattggat tgtcaagg attggcaac agctacaact gcagcaatt cactgatac tacttgatac gactcaagct caagccaaa ctcgttgac ctcaacttg ccatcatat gtggtatcta ccctaactac tatagtgctc caggagat tgccactgt ggtggtgttt ggtactgaa tgtaacaat taatagtgct caggagatat acaatcacat gtggtggtct tgaacattag aggtggtgtct ggtactgaa tgaacactac tatagtgcc ctaggagaa aacatcatcat gtggtacgt tgaaacttag ggtcatataa atcaacata aatagtcatcta cct

cct
<210> 14
<211> 156
<212> PRT
<213> Oryza sativa

<220> <223> 13kD prolamine

```
591508035Seqlist.txt
                           135
                                                  140
Pro Arg Ser Ile Ala Thr Val Gly Gly Val
145
                       150
<210>
        15
<211>
        601
<212>
       DNA
<213>
       Oryza sativa
<220>
<223> 13kD prolamine
<400> 15
attatacaac aaaaatttaa aagaactagt gtcctgcaac aatgaagatc attttcgtct
ttgctctcct tgctattgct gcatgcagcg ccactgcgca gtttgatgtt ttaggtcaaa
atattaggca atatcaggtg cagtcgcctc tcctgctaca gcaacaggtg cttagcccat
ataatgagtt cgtaaggcag cagtatagca ttgcggcaag caccttcttg caatcagctg
cgtttcaact gagaaacaac caagtctigc aacagctcag gctggtggcg caacaatctc
ačtaccagga čaťtaacgtt gtcčaggcča tagcgcacca gctáčaččtč cagcagtttg
gcaatctcta cattgaccgg aatctggctc aagctcaagc actgttggct tttaacttgc
catctacata tggtatctac ccttggtcct atagtgcacc cgatagcatt accacccttg
gcggtgtctt głáctgaatt ttcacáatat tgtágítcgg aágtgáaaat ataagctcag
gtatcatcgt atgtgacatg tgaaacttga ggtgatataa atagaaataa aattatcttt
<210>
<211>
      151
<212>
       PRT
<213>
       Orvza sativa
<220>
<223> 13kD prolamine
<400> 16
Met Lys Île Île Phe Val Phe Ala Leu Leu Ala Île Ala Ala Cys Ser
1 5 10 15
Ala Thr Ala Gln Phe Asp Val Leu Gly Gln Asn Ile Arg Gln Tyr Gln
20 25 30
Val Gln Ser Pro Leu Leu Gln Gln Gln Val Leu Ser Pro Tyr Asn
35 40 45
Glu Phe Val Arg Gln Gln Tyr Ser Ile Ala Ala Ser Thr Phe Leu Gln 50 55 60
Ser Ala Ala Phe Gln Leu Arg Asn Asn Gln Val Leu Gln Gln Leu Arg
65 70 75 80
Leu Val Ala Gln Gln Ser His Tyr Gln Asp Ile Asn Val Val Gln Ala
                  85
Ile Ala His Gln Leu His Leu Gln Gln Phe Gly Asn Leu Tyr Ile Asp
                                     105
Arg Asn Leu Ala Gln Ala Gln Ala Leu Leu Ala Phe Asn Leu Pro Ser
Thr Tyr Gly Ile Tyr Pro Trp Ser Tyr Ser Ala Pro Asp Ser Ile Thr
130 135
Thr Leu Gly Gly Val Leu Tyr
145
<210>
        17
        596
<211>
<212>
        DNA
<213>
       Oryza sativa
<220>
```

60 120 180

240

300

360 420

480

540

600 601

<223> 13kD prolamine

```
<400> 17
gcaaaataga aagatctagt gtcccgcagc aatgaagatc attttcgtct ttgctctcct
tgctattgct gcatgcagcg cctctgcgca gtttgatgtt ttaggtcaaa gttataggca
                                                                                    180
atatcagetg cagtegeetg teetgetaca geaacaggtg ettageecat ataatgagtt
athatcagidg cagtatggca taginggcaag eccettettg caatcagit actalgagit
gagaaacaac caagtitggc ataginggcaag eccettettg caatcagit egitticaact
gagaaacaac caagtitggc acagittgg getigtigge caacaatict actatcagga
cattaacatt gittaggcca taginggaga gittagaact cagaagtitg gigaaticta
                                                                                    240
                                                                                    300
                                                                                    360
ctttgatcgg aatctggctc aagctcaagc tctgttggct tttaacgtgc catctagata
                                                                                    420
tggtätctäc cctaggtact atggtgcacc cagtaccatt accacccttg gcggtgtctt
                                                                                    480
                                                                                    540
gtaatgagtt ttaacagtat agtggttcgg aagttaaaaa taagctcaga tatcatatat
gtgacatgtg aaactttggg tgatataaat agaaaaaaag ttgtctttca tattta
                                                                                    596
<210>
        18
<211>
        150
<212> PRT
<213> Oryza sativa
<220>
<223> 13kD prolamine
<400> 18
Met Lys Ile Ile Phe Val Phe Ala Leu Leu Ala Ile Ala Ala Cys Ser
1 10 15
Ser Ala Ala Phe Gln Leu Arg Asn Asn Gln Val Trp Gln Gln Leu Ala
65 _ _ _ 70 _ _ 75 _ _ 80
Leu Val Ala Gln Gln Ser His Tyr Gln Asp Ile Asn Ile Val Gln Ala
85 90 95
Ile Ala Gln Gln Leu Gln Leu Gln Gln Phe Gly Asp Leu Tyr Phe Asp
Arg Asn Leu Ala Gln Ala Gln Ala Leu Leu Ala Phe Asn Val Pro Ser
115 120 125
Arg Tyr Gly Ile Tyr Pro Arg Tyr Tyr Gly Ala Pro Ser Thr Ile Thr
130 135 140
Thr Leu Gly Gly Val Leu
145
<210>
        19
<211> 616
<212> DNA
<213> Oryza sativa
<220>
<223> 13kD prolamine
<400> 19
cagttcaagc attatacagc aaaatagaaa gatctagtgt cccgcagcaa tgaagatcat
                                                                                     60
tticgtctit gctctcctig ctattgctgc atgcagcgcc tctcgcagtt tgatittagg
                                                                                    120
tcaaagttat aggcaatatc agctgcagtc gcctgtcctg ctacagcaac aggtgcttag
                                                                                    180
cccatātaat gāgttcgtaa gcagcagtat ģgcatacggc aaccccttct tģcaātcagc
                                                                                    240
tgcgtttcaa ctgagaaaca accaagtctg gcaacagctc gcgctggtgg cgcaacaatc
tcactatcag gacattaaca ttgttcaggc catagcgcag cagctacaac tccagcagtt
                                                                                    300
                                                                                    360
tggtgatctc tactttgatc ggaatctggc tcaagctcaa gctctgttgg cttttaacgt
gccacctaaa tatggtatct accctaggta ctatggtgca cccagtacca ttaccaccct
                                                                                    420
                                                                                    480
tggcggtgtc ttgtaatgaa tttaacagta taatggtcgg aagttaaaaa taagctcaga
                                                                                    540
tateeteata tgigacaigt gaaactiigg gigalataaa taaaaaaaa atigiettie
                                                                                    600
```

616

ctatttaaaa aaaaaa

```
<210>
      20
<211>
     148
<212>
      PRT
```

<213> Oryza sativa

<220> <223> 13kD prolamine

<400> 20

Met Lys Ile Ile Phe Val Phe Ala Leu Leu Ala Ile Ala Ala Cys Ser Ser Leu Ile Leu Gly Gln Ser Tyr Arg Gln Tyr Gln Leu 20 25 30 Gln Ser Pro Val Leu Leu Gln Gln Gln Val Leu Ser Pro Tyr Asn Glu 40 Phe Val Ser Ser Ser Met Ala Tyr Gly Asn Pro Phe Leu Gln Ser Ala 55 Ala Phe Gln Leu Arg Asn Asn Gln Val Trp Gln Gln Leu Ala Leu Val 65 70 75 80 Ala Gln Gln Ser His Tyr Gln Asp Ile Asn Ile Val Gln Ala Ile Ala 85 90 95 Gln Gln Leu Gln Gln Gln Phe Gly Asp Leu Tyr Phe Asp Arg Asn 100 105 Leu Ala Gln Ala Gln Ala Leu Leu Ala Phe Asn Val Pro Pro Lys Tyr 115 120 125 Gly Ile Tyr Pro Arg Tyr Tyr $\overline{\text{Gly}}$ Ala Pro Ser Thr $\overline{\text{Ile}}$ Thr Thr Leu 130 140 Gly Gly Val Leu 145

```
<210> 21
<211> 769
<212> DNA
<213> Oryza sativa
<220>
<223> 13kD prolamine
<220>
<221> misc_feature
<222> (11)..(11)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<222> (109)..(109)
<223> n is a, c, g, or t
<220>
```

<221> misc_feature <222> (207)..(207) <223> n is a, c, g, or t

<400> 21

<210> 21

ttgctccttc nccqtcctcc ccqcttqqqc tcttqqqcqc ccqttccqqq cqcccctcc ctčctccctc cgcggtaccc ggccgcčtča ctccťctgct ggaccccčng gccgcccgg gccgcgcccc atcccggtgc gcgacccatc gttcacacag ttcaagcatt atacagaaaa atagaaagat ctagtgtccc gcagcanatg aagatcattt tcgtctttgc tctccttgct attgctgcat gcaggcctct gccgagtttg atgtttttag gtcaaagtta taggcaatat cagctgcagt cgcctgtcct gctacagcaa caggtgctta gcccatataa tgagttcgta aggcagcagt atggcatagc ggcaagcccc ttcttgcaat cagctgcatt tcaactgaga aataaccaag tctggcaaca tcaggctggt ggccaacaat ctcgctatca ggacattaac attgttcagg ccatagcgta cgagctacaa ctccagcaat ttggtgatct ctactttgat Page 9

```
591508035Seqlist.txt
cggaatcagg ctcaagctca agctctattg gcttttaacg tgccatctag atatggtatc
                                                                             600
                                                                             660
taccctaggt actatggtgc acccagtacc attaccaccc tiggcggtgt cttgtaatgt
gttttaačag tatagīggīt cggaagttaa aaataagctc agāīatcatc atatgtgaca
tgtgaaactt tgggtgatat aaatagaaat aaagttgcct ticatattt
                                                                             769
<210>
<211>
        149
<212>
       PRT
<213> Orvza sativa
<220>
<223> 13kD prolamine
<400> 22
Met Lys Ile Ile Phe Val Phe Ala Leu Leu Ala Ile Ala Ala Cys Arg
Pro Leu Pro Şer Leu Met Phe Leu Gly Gin Ser Tyr Arg Gln Tyr Gln
Leu Gln Ser Pro Val Leu Leu Gln Gln Gln Val Leu Ser Pro Tyr Asn 35 40 45
Glu Phe Val Arg Gln Gln Tyr Gly Ile Ala Ala Ser Pro Phe Leu Gln 50 60
Ser Ala Ala Phe Gln Leu Arg Asn Asn Gln Val Trp Gln His Gln Ala
                                            75
                      70
Gly Gly Gln Gln Ser Arg Tyr Gln Asp Ile Asn Ile Val Gln Ala Ile
Ala Tyr Glu Leu Gln Leu Gln Gln Phe Gly Asp Leu Tyr Phe Asp Arg
             100
                                   105
Asn Gln Ala Gln Ala Gln Ala Leu Leu Ala Phe Asn Val Pro Ser Arg
                               120
                                                     125
Tyr Gly Ile Tyr Pro Arg Tyr Tyr Gly Ala Pro Ser Thr Ile Thr Thr
130 135 140
Leu Gly Gly Val Leu
145
<210>
       23
<211> 609
<212>
       DNA
<213> Oryza sativa
<220>
<223> 13kD prolamine
<400> 23
aagcattata caacaaaaat ttaaaagaac tagtgtcctg caacaatgaa gatcattttc
gtötttgoto toottgotat tgotgoatgo godadagogo agtttgatgt ittaggtoaa
                                                                             180
äatattäggc aatatcaggt gcagtcgcct ctcctgctäc agcaacaggt gcttägccta
tataatgagt tcgtaaggca gcagtatagc attgcggcaa gccccttctt gcaatcagct
                                                                             240
                                                                             300
gtgtttcaac tgagaaacaa ccaagtcttg caacagctca ggctggtggc gcaacaatct
Sattaccagg acattaacgt tgtccaggcc atagcgcagc agctgcacct ccagcagttt
gcatctct acattgaccg patctggct caagcgcaac gactgttgg ttttaactt
ccatctacat atggtact acctaggtac tatagagcac gggtagtat taccaccctt
                                                                             360
                                                                             420
                                                                             480
ggcggtgtct tgtactgaat tttcacaata ttgtagttcg gaagtgaaaa tataagcctc
                                                                             540
aggtatcatc gtatgtgaca tgtgaaactt aaggtgatat aaatagaaat aaaattatct
                                                                             600
ttcatattt
                                                                             609
<210>
        24
<211>
        150
```

PRT <220> <223> 13kD prolamine

Orvza sativa

<212>

<213>

```
<210> 25
<211> 596
```

- <212> DNA <213> Oryza sativa
- <220> <223> 13kD prolamine
- <400> 25
 cagcaaaat agaaagatct agtgtcccgc agcaatgaag atcattttcg tctttgctct ccttgctatt gctgcatgca ggcctctgca gtttgatgtt ttaggtcaaa gttataggca atattaggtg cagtgcctg tcctgctaca gracactgtg cttagcccat ataatgagtt cgtaaggcag cagtatggca tagcggcaag cccttcttg caatcagctg cgtttcaact gagaaacaac caagtctgg cagtcaggccg cgtggtggcg caacaatctc actacaggca tatacactg gttcaggcattagcga gctacaact cagcagtttg gtgatctcta ctttgatcg agtctggtc
 cattaacatt gttcaggcca tagcgcagca gctacaactc cagcagtttg gtgatctcta ctttgatcg actctggtc
 cttygtatctac cctaggtact atggtcagca cagtaccatt accaccttg gcgtgtctt gtaatgagtt ttaacagtat atcatcata taggacagat ttaacagtat accaccttg gcgtgtctt gtgatagagt ttaacagtat atcatcata tggtgcact gaaactttg gaaactttgg gtgataaaa taggacaaaa gttgtctttc atatt

60

120 180

240

300

360 420

480 540

596

- <210> 26 <211> 149 <212> PRT
- <213> Oryza sativa
- <220> <223> 13kD prolamine

<400> 26
Met Lys Ile Ile Phe Val Phe Ala Leu Leu Ala Ile Ala Ala Cys Arg
1
Pro Leu Gln Phe Asp Val Leu Gly Gln Ser Tyr Arg Gln Tyr Gln Leu
20
Gln Ser Pro Val Leu Leu Gln Gln His Val Leu Ser Pro Tyr Asn Glu
40
Phe Val Arg Gln Gln Tyr Gly Ile Ala Ala Ser Pro Phe Leu Gln Ser
50
Ala Ala Phe Gln Leu Arg Asn Asn Gln Val Trp Gln Gln Leu Ala Leu
50
Val Ala Gln Gln Ser His Tyr Gln Asp Ile Asn Ile Val Gln Ala Ile
10
11
12
14
15
16
16
17
17
18
19
10
11
12
12
14
15
16
16
17
17
18
19
19
19
19
19
10
10
11
11
12
12
13
14
15
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
16
1

90 Ala Gln Gln Leu Gln Leu Gln Gln Phe Gly Asp Leu Tyr Phe Asp Arg 100 105 110 Asn Leu Ala Gln Ala Gln Ala Leu Leu Ala Phe Asn Val Pro Ser Arg 115 120 125 Tyr Gly Ile Tyr Pro Arg Tyr Tyr Gly Ala Pro Ser Thr Ile Thr Thr 130 135 Leu Gly Gly Val Leu

<210> 27 <211> 285 <212> DNA

<213> Oryza sativa

<220> <223> 13kD prolamine

<400> 27

gttcgtaagg caacagtata gcatagtggc aacccccttc tggcaaccag ctacgtttca tttgataaac aaccaagtca tgcagcagca gttttgccaa cagctcaggc tggtagcaca acatteteae taccaggeca ttagtattgt teaagegatt gtgeaacage tacaactgea geattttagt ggtgtetaet ttgateagae teaageteaa geecaaactt ttttgaeett caactttccc atccatatgt ggtatctacc ttaacttact attgt

<210> <211> 94 <212> PRT

<213> Oryza sativa

<220> <223> 13kD prolamine

<400> 28 Phe Val Arg Gln Gln Tyr Ser Ile Val Ala Thr Pro Phe Trp Gln Pro Ala Thr Phe His Leu Ile Asn Asn Gln Val Met Gln Gln Gln Phe Cys 25 Gln Gln Leu Arg Leu Val Ala Gln His Ser His Tyr Gln Ala Ile Ser 40 Ile Val Gin Ala Ile Val Gin Gin Leu Gin Leu Gin His Phe Ser Gly 50 55 60 Val Tyr Phe Asp Gln Thr Gln Ala Gln Ala Gln Thr Phe Leu Thr Phe Asn Phe Pro Ser Ile Cys Gly Ile Tyr Leu Asn Leu Leu Leu

<210> 29 <211> 1836

<212> DNA <213> Oryza sativa

<220> <223> 13kD prolamine

<400> 29

tccacatggg acggggccaa ggtgaggaaa gcaagctgca caaaggatta aagttcttgt aaacttgaaa ctcaatttga gtgtttatcc tagctaatat gatcccttca tcctagaata taacaatcta gaattagatg tgctatctaa acacattgta gtaggtaatg tgtcatctaa tcttagatat aatctaaaac ggaaggtgaa acggagggag tacctacata gtaatggcat gcctatgttg cttaatttga cccgtgcagc tgagtatatg tgatggagac aaaagttact ttcatgatgg caccaaagga gatitgttgg ggtgcctaai agaacatcga tccaaatgac acqacacact tagattctaa taggacatcc aagcaaaaca acacttagat cctaatagga

```
591508035Seqlist.txt
catccaagca aaactaacac tctagagcaa ccgataagga attgaaaaag tttgtccatc
                                                                                          480
                                                                                          540
attettgaca agaggtagtg tacaaaaaaa atatttagtt gagetetege teaetacgca
tcacagaagt ataacctaga tataattaat tcagtataga agcaaaaatt cagcagcaac
                                                                                          600
aatgagggta aaaactagaa agaaggattt atgatgttcc tcagtttatt cagtcgcaaa
                                                                                          660
agatagitta cigitaaacaa aatggataat aaaccigaig ittcaacaaa aciagaggaa
cicigitaaat igiccaggit caiccciaga agiiggitic iccitacggg aggagggagi
                                                                                          780
atatytgatg gacacaaaag ttactttcat gatgaaacca aagggtattt gttggggcac
                                                                                          840
ctaacagaac atctatctaa atgacatgac tcacttagat cctaatagga catccaagca
                                                                                          900
aaactaacac tctaaagcaa ccgatgagga attgaaagaa aatatatgcc atcgcatcta
                                                                                          960
                                                                                         1020
taaatagaca agcccaatga aaaccctcct catcgtttac acagttcaag cattatacag
aaaagaagat ctagtgtccc gcagcaatga agatčatttt ccgtctttgc tctccttgct
attgctgcat gcaacacctc tgcgtagttg atgttttagg tcaaagttat aggcaatatc
                                                                                         1080
                                                                                         1140
                                                                                         1200
agctacagtc gcctctccta caacaacaac aggtgcttag cccatataat gacttcgtaa
ggcagcgata tggcatagcg gcaagcccct tcttgcaatc agctgcgttt aaactgagaa
ataaccaagt ctggcaacag ctcgggctgg tggcgcaaca atctcactat caggacatta
                                                                                         1260
                                                                                         1320
acattgttca ggccatagcg cagcagctat aactccagca gtttggtgat ctctactttg
atcggaatcc ggctcaagct caagctctgt tggcttttaa cgtgccatct agatatggta
                                                                                         1380
                                                                                         1440
tctaccctag gtactatagt acacccagta ccattaccac ccttggcggt gtcttgtaat
                                                                                         1560
gagttttaac agtatagtgg ttcggaagtt aaaaataagc tcatatatta tcatatgtga
catgtgaaat ttggggtgaa ataaatcgaa ataaagttgt ctttcatatt taaataccat
                                                                                         1620
gcctctataa ggatatatcc tagtacattg tcgtaactaa ttaccatcat cggtactcta
                                                                                         1680
čaattttact grutettac atrogatocg aagctacttt gtttttaaga täraaatgga
gogtataaaag gatgtccgtc ctttcattcc aaraagaaca atgtaacatc ctgaaaatgt
gtcatttct aatcctgcat catgccgact cttatg
                                                                                         1740
                                                                                         1800
                                                                                         1836
```

<210> <211> 101 <212> PRT

<213> Oryza sativa

<220> <223> 13kD prolamine

<400> 30

Met Lys Île Île Phe Arg Leu Cys Ser Pro Cys Tyr Cys Cys Met Gln His Leu Cys Val Val Asp Val Leu Gly Gln Ser Tyr Arg Gln Tyr Gln 20 25 30 Leu Gln Ser Pro Leu Leu Gln Gln Gln Gln Val Leu Ser Pro Tyr Asn 35 40 45
Asp Phe Val Arg Gln Arg Tyr Gly Ile Ala Ala Ser Pro Phe Leu Gln 50 60 Ser Ala Ala Phe Lys Leu Arg Asn Asn Gln Val Trp Gln Gln Leu Gly 65 70 80 Leu Val Ala Gln Gln Ser His Tyr Gln Asp Ile Asn Ile Val Gln Ala Ile Ala Gln Gln Leu 100

<210> <211> 622 <212> DNA

<213>

rice <220>

<223> 16kD prolamine

<400> 31 aaacatcaaa acgttataag agttctctag catccatcac atagccatga agatctttgt gagcagctgc caggtgatgc ggcagcaatg ctgtcagcag atgaggttga tggcgcaaca Page 13

atatcattgc caggctattt gcaccatggt gcagtctatc atgcagcaag tgcagtttga tgctggcttt gttggcagc cccaagctca ggcccaggcc caggtggctc tcaatttgcctccatggtg ggagtctac ctaggtactg agcactca tgcaagattgt ctactggtca ttgcggttct tggtagtgtg taccatcata tatatatagt tggataaata aagtgtcaca catcatcgtg tgtyctagt aataaaattt ggaatagtct ttggctgttc gtatgaataa atgaaaatta taacaaaaaa a

<210> 32 <211> 149 <212> PRT

<213> rice

<220> <223> 16kD prolamine

<400> 32
Met Lys Ile Phe Val Ile Leu Ser Leu Leu Ala Leu Ala Ala Ser Ser
1
Ala Ser Ala Gln Phe Asp Ala Cys Thr Tyr Gly Gln Cys Gln Gln Gln Gln
Pro Phe Met Gln Pro Ile Met Asn Pro Cys Asn Glu Phe Val Arg Gln
Gln Cys Ser Pro Met Ser Leu Pro Trp Lys Gln Ser Arg Arg Leu Gln
50
Leu Ser Ser Cys Gln Val Met Arg Gln Gln Cys Cys Gln Gln Met Arg
65
Leu Met Ala Gln Gln Tyr His Cys Gln Ala Ile Cys Thr Met Val Gln
Ser Ile Met Gln Gln Val Gln Phe Asp Ala Gly Phe Val Gly Glu Pro
Gln Ala Gln Ala Gln Ala Gln Val Gln Phe Asp Ala Gly Phe Val Gly Gly Pro
Gln Ala Gln Ala Gln Ala Gln Val Gln Phe Asp Ala Gly Phe Val Gly Gly Pro
Gln Ala Gln Ala Gln Ala Gln Val Gln Val Ala Leu Asn Leu Pro Ser Met Cys
130
Gly Val Tyr Pro Arg Tyr Cys Ser Thr Pro Cys Lys Val Ala Thr Gly
His Cys Gly Ser Trp

<210> 33 <211> 562 <212> DNA

<213> Oryza sativa

<220> <223> 10kD prolamine

60

120

180

240

<210> 34 <211> 134 <212> PRT <213> Oryza sativa

<220>

<223> 10kD prolamine

<400> 34
Met Ala Ala Tyr Thr Ser Lys Ile Phe Ala Leu Phe Ala Leu Ile Ala 15
Leu Ser Ala Ser Ala Thr Thr Ala Ile Thr Thr Met Gln Tyr Phe Pro 25
Pro Thr Leu Ala Met Gly Thr Met Asp Pro Cys Arg Gln Tyr Met Met 50
Gln Thr Leu Gly Met Gly Ser Ser Thr Ala Met Phe Met Ser Gln Pro 65
Met Ala Leu Leu Gln Gln Gln Cys Cys Met Gln Leu Gln Gly Met Met Met Ala Leu Leu Gln Gln Gln Cys Cys Met Gln Leu Gln Gly Met Met Gln Ser Met Gln Glo Met Gln Met Gln Met Met Lys Met Ala Lib
Met Gln Val Ile Cys Ala Gly Leu Gly Gln Gln Gln Met Met Lys Met Ala 105
Met Gln Met Gln Met Met Gln Ser Met Ala Pro Val Asp Phe Gln Leu Gln Gln Met Met Lys Met Ala 115
Ser Ser Cys Gly Cys Cys

<210> 35 <211> 332 <212> DNA

<213> Oryza rufipogon

<220> <223> 10kD prolamine

60

120 180

240

300

332

<210> 36 <211> 110 <212> PRT

<213> Oryza rufipogon

<220> <223> 10kD prolamine

```
591508035Seqlist.txt
<211> 349
<212> DNA
<213> Oryza longistaminata
<220>
<223> 10kD prolamine
<220>
<221>
       misc_feature
<222>
       (18)..(19)
<223>
       n is a, c, g, or t
<400> 37
cctightigc cthaatinnt citciticig caagigccac tactgcaatc actactatigc
agitatticcc accancatta gccatigggca ccatiggatcc gigiaggcag tacatgatigc
aaacgitiggg catigggiagc iccacaacca igitcatigic gcagccaaig gcgcicciigc
agcagcaatg ttgcatgcag ctacaaggca tgatgcctca gtgccactgt ggcaccagtt
gccagatgat gcagagcatg caacaagttg titgigctgg actcgggcag cagcagatga
tgatgaagat ggcaatgcag atgccataca tgtgcaacat ggcccctgt
<210>
        38
<211>
        116
<212>
        PRT
<213> Oryza longistaminata
<220>
<223> 10kD prolamine
<220>
<221>
       misc_feature
<222>
        (6)..(6)
       Xaa can be any naturally occurring amino acid
<223>
<400> 38
Leu Phe Ala Leu Ile Xaa Leu Leu Ser Ala Ser Ala Thr Thr Ala Ile
                                         10
Thr Thr Met Gln Tyr Phe Pro Pro Thr Leu Ala Met Gly Thr Met Asp
             20
                                    25
Pro Cys Arg Gln Tyr Met Met Gln Thr Leu Gly Met Gly Ser Ser Thr
Thr Met Phe Met Ser Gln Pro Met Ala Leu Leu Gln Gln Gln Cys Cys
Met Gin Leu Gln Gly Met Met Pro Gln Cys His Cys Gly Thr Ser Cys
GÎn Met Met Gîn Ser Met Gîn Gîn Val Val Cys Ala Gîy Leu Gîy Gîn
                  85
Gln Gln Met Met Met Lys Met Ala Met Gln Met Pro Tyr Met Cys Asn
             100
Met Ala Pro Val
         115
<210>
       343
<211>
<212>
       DNA
<213> Oryza rufipogon
<220>
<223> 10kD prolamine
<400> 39
ctgtttgcct taattgctct ttctgcaaqt gccactactg caatcaccac tatgcagtat
ttčccačcaa cattagccat gggcaccatg gatccgtgta ggcagtacat gatgcaaacg
```

ttgggcatgg gtagctccac agccatgttc atgtcgcagc caatggcgct cctgcagcag

Page 16

60 120 180

240 300

caatgttgca tgcagctaca aggcatgatg cctcagtgcc actgtggcac cagttgccag atgatgcaga gcatgcaaca agitatitgi gctggacicg ggcagcagca gaigaigaag atggcgatgc agatgccata catgtgcaac atggcccctg tca

240 300 343

- <210> 40
- <211> 113 <212> PRT
- <213> Oryza rufipogon
- <220> <223> 10kD prolamine

<400> 40

Leu Phe Ala Leu Ile Ala Leu Ser Ala Ser Ala Thr Thr Ala Ile Thr 1 10 15 Thr Met Gln Tyr Phe Pro Pro Thr Leu Ala Met Gly Thr Met Asp Pro Gln Leu Gln Gly Met Met Pro Gln Cys His Cys Gly Thr Ser Cys Gln 65 70 75 80 Met Met Gln Ser Met Gln Gln Val Ile Cys Ála Gly Leu Gly Gln Gln 85 90 Gln Met Met Lys Met Ala Met Gln Met Pro Tyr Met Cys Asn $\overline{\text{Met}}$ Ala 100 105 110

- <210> 41 <211> 339
- <212> DNA <213> Oryza rufipogon
- <220> <223> 10kD prolamine

<400> 41

tttgccttaa ttgctctttc tgcaagtgcc actactgcaa tcaccactat gcagtatttc ccaccaacat tagccatggg caccatggat ccgtgtaggc agtacatgat gcaaacgttg ggcatgggta gctccacage catgttčatg tcgcagcčaa tggcgctčct gcagcagcaa tgttgcatgc agctacaagg catgatgcct cagtgccact gtggcaccag ttgccaaga atgcagagca tgcaacaagt tatttgtgct ggactcaggc agcagcagat gatgaagatg gcgatgcaga tgccatacat gtgcaacatg gcccctgtc

- <210> 42 113 <211>
- <212> PRT <213> Oryza rufipogon
- <220> <223> 10kD prolamine

<400> 42 Phe Ala Leu Ile Ala Leu Ser Ala Ser Ala Thr Thr Ala Ile Thr Thr 1 5 10 15 Met Gln Tyr Phe Pro Pro Thr Leu Ala Met Gly Thr Met Asp Pro Cys Arg Gln Tyr Met Met Gln Thr Leu Gly Met Gly Ser Ser Thr Ala Met Phe Met Ser Gln Pro Met Ala Leu Leu Gln Gln Gln Cys Cys Met Gln 50 60 Leu Gln Gly Met Met Pro Gln Cys His Cys Gly Thr Ser Cys Gln Met

```
591508035Seqlist.txt
                                            75
Met Gln Ser Met Gln Gln Val Ile Cys Ala Gly Leu Gly Gln Gln Gln
                                        90
                 85
Met Met Lys Met Ala Met Gln Met Pro Tyr Met Cys Asn Met Ala Pro
                                   105
va1
<210>
       43
       343
<211>
<212> DNA
<213> Oryza rufipogon
<220>
<223> 10kp prolamine
<220>
<221> misc_feature
<222> (19)..(19)
<223> n is a, c, g, or t
<400> 43
ccctgtttgc cttaattgnt ctttctgcaa gtgccactac tgcaatcacc actatgcagt atttcccacc aacattagcc atgggcacca tggatccgtg taggcagtac atgatgcaaa
cgttgggcat gggtagcīcc acagccatgt tcatgtcgca gccaatggcg ctcctgcagc
agcaatgttg čatgcagcta caaggcatga tgcctcagtg ccactgtggc accagttgcc
agatgatgca gagcatgcaa caagttattt gtgctggact cgggcagcag cagatgatga
agatggcgat gcagatgcca tacatgtgca acatggcccc tgt
<210> 44
<211> 114
<212> PRT
<213> Orvza rufipogon
<220>
<223> 10kD prolamine
<220>
<221> misc_feature
<222>
        (6)..(6)
<223>
       Xaa can be any naturally occurring amino acid
<400> 44
Leu Phe Ala Leu Ile Xaa Leu Ser Ala Ser Ala Thr Thr Ala Ile Thr
                                       10
Thr Met Gln Tyr Phe Pro Pro Thr Leu Ala Met Gly Thr Met Asp Pro
Cys Arg Gln Tyr Met Met Gln Thr Leu Gly Met Gly Ser Ser Thr Ala
Met Phe Met Ser Gln Pro Met Ala Leu Leu Gln Gln Gln Cys Cys Met
                          55
Gln Leu Gln Gly Met Met Pro Gln Cys His Cys Gly Thr Ser Cys Gln 65 70 75 80
Met Met Gln Ser Met Gln Gln Val Ile Cys Ala Gly Leu Gly Gln Gln
85 90 95
Gln Met Met Lys Met Ala Met Gln Met Pro Tyr Met Cys Asn Met Ala
100 105 110
Pro Val
<210> 45
```

60 120 180

240

300

343

<211> 533 <212> DNA <213> Oryza sativa

```
<220>
<223> 10kD prolamine
<400> 45
atggcagcat acaccagcaa gatctttgcc ctgtttgcct taattgctct ttctgcaagt
gccactactg caatcaccac tatgcagtat ttcccaccaa cattagccat gggcaccatg
                                                                                               60
                                                                                              180
gatccgtgtā ggcagtacat gatgcaāacg ttgggcatgg gtagctccac āgccatgttc
atgtcgcagc caatggcgct cctgctgcag caatgttgca tgcagctaca aggcatgatg
                                                                                              240
cctcagtgcc actgtggcac cagttgccag atgatgcaga gcatgcaaca agttatttgt
                                                                                              300
                                                                                              360
gctggactcg ggcagcagca gatgatgaag atggcgatgc agatgccata catgtgcaac
garggaccig graphica activitetic tytiggitytt gitigatgaaa cyftiggitac
atgiactia ficaacticca activitetic tytiggitytt gitigatgaaa cyftiggitac
atgiactica gitaataaggi gitigaatac atcgifytyca aacactagaa ataagtacca
titgaataaaa tatcaaacat titicagacti gcaaaaaaaa ataaaaaaa
                                                                                              420
                                                                                              480
                                                                                              533
<210> 46
<211> 134
<212> PRT
<213> Oryza sativa
<220>
<223> 10kD prolamine
<400> 46
Met Ala Ala Tyr Thr Ser Lys Ile Phe Ala Leu Phe Ala Leu Ile Ala
Leu Ser Ala Ser Ala Thr Thr Ala Ile Thr Thr Met Gln Tyr Phe Pro
20 30
Pro Thr Leu Ala Met Gly Thr Met Asp Pro Cys Arg Gln Tyr Met Met 35 40 45
Gln Thr Leu Gly Met Gly Ser Ser Thr Ala Met Phe Met Ser Gln Pro 50 60 Met Ala Leu Leu Gln Gln Cys Cys Met Gln Leu Gln Gly Met Met 65 70 80
Pro Gln Cys His Cys Gly Thr Ser Cys Gln Met Met Gln Ser Met Gln Ser Met Gln Val Ile Cys Ala Gly Leu Gly Gln Gln Gln Met Met Lys Met Ala
Met Gln Met Pro Tyr Met Cys Asn Met Ala Pro Val Asn Phe Gln Leu
115 120 125
Ser Ser Cys Gly Cys Cys
130
<210> 47
<211> 940
<212> DNA
<213> rice
<220>
<223> 10kDa prolamine promoter
aatttagatc tatacatccg ttggtacatc tctactactc tagtactaaa aacatgagat
                                                                                               60
ctgaacatgg ctgcataggt tctccatccc aattcaccct gcagtgatcg ctgcactgga
taattataat atcagttaaa attgaaaata atgcaacttc atacttgcat ggtgtcagta
                                                                                              180
qtqcctqcct aaqaaatqtq tcttqtcata atatqattac atqaaatatq tttacttcct
                                                                                              240
tcgtttctct ttatttgtaa gataaagaac tagatatgtg gaaagtagga tagcaaagag
                                                                                              300
tatggccaaa ctctaatctt tgctttättt tttgggatgg acccaaaatt tgtttctcct
                                                                                              360
thrughcum
thattettt continued adatytictt tacticeaat tettattaac adaaccicaa
atacatycca aactycatat giatytatys tattaaggoc catticacaa goticaagit
tacctactca atcattcaca tatygogotg acticaaactc tiaatigita tetygigaag
                                                                                              420
                                                                                              480
                                                                                              540
ctgtgacttg tgtaacacat tctacaagtc ccatacgaat tctgttcaca aaagtttctt
                                                                                              600
tgiccagete alaatttaca aaactgeaaa atgecaaage aatetggeae aacettatea
                                                                                              660
tčatatittc tttccacgca ttaaagcact ggčagaatia tctttgigta gatattccaa
```

Page 19

```
591508035Seqlist.txt
aagtattggt tgaataaatg tccaaataaa ttccatgcct catgatttcc agcttatgtg
                                                                                         780
                                                                                         840
gcctccacta ggtggttttg caaaggccaa actctttcct ggcttacaca gctaccagca
                                                                                         900
tgtataaata ggcccctagg caaccattat tccatcatcc tcaacaatat tgtctacacc
                                                                                         940
atctggaatc ttgtttaaca ctagtattgt agaatcagca
<210>
         48
<211>
         1351
<212>
        DNA
<213>
         rice
<220×
<223> GLUTELIN-B1 promoter
<400> 48
gatttcgatt tttgaggaat tttagaagtt gaacagagtc aatcgaacag acagttgaag
agatatggat tttctaagat taattgattc tctgtctaaa gaaaaaaagt attattgaat
                                                                                           60
                                                                                         120
taaatggaaa aagaaaaagg aaaaagggga tggcttctgc tttttgggct gaaggcggcg
                                                                                         180
tgtggccagc gtgctgcgtg cggacagcga gcgaacacac gacggagcag ctacgacgaa
                                                                                         240
                                                                                         300
cgggggaccg agiggaccgg acgaggatgt ggcctaggac gagigcacaa ggctagiga
ctcggtcccc gcgcggtatc ccgagtggtc cactgtctgc aaacacgatt cacatagagc
                                                                                         360
                                                                                         420
gggčágacgc gggagčcgtc ctággtgčac cggaágcaáa tccgtcgcct gggtggátít
gagtgacacg gcccacgtgt agcctcacag ctctccgtgg tcagatgtgt aaaattatca
taatatgtgt ttttcaaata gttaaataat atatataggc aagttatatg ggtcaataag
                                                                                         480
                                                                                         540
cagtaaaaag gcttatgaca tggtaaaatt acttacacca atatgcctta ctgtctgata
                                                                                         600
tattttacat gacaacaaag ttacaagtac gtcatttaaa aatacaagtt acttatcaat
tgtagtgtat caagtaaatg acaacaaacc tacaaatttg ctattttgaa ggaacactta
                                                                                         660
                                                                                         720
aaaaaatcaa taggcaagtt atatagtcaa taaactgcaa gaaggcttat gacatggaaa
                                                                                         780
aattacatac accaatatgc tttattgtcc ggtatatttt acaagacaac aaagttataa
                                                                                         840
                                                                                         900
gtatgtcatt taaaaataca agttacttat caattgtcaa gtaaatgaaa acaaacctac
                                                                                         960
äaatītgtta ttttgaagga acacctaaat tatcaāatat āgcttgctac gcaaaatgac
aacatgčtta caagttatta tcatcttaaa gttagactca tčttctcaag čataagagct
ttatggtgca aaaacaaata taatgacaag gcaaagatac atacatatta agagtatgga
cagacatttc tttaacaaac tccatttgta ttactccaaa agcaccagaa gtttgtcatg
                                                                                        1080
                                                                                        1140
gctgagtcat gaaatgtata gttcaatctt gcaaagttgc ctttcctttt gtactgtgtt
ttaacactac aagccatata ttgtctgtac gtgcaacaaa ctatatcacc atgtatccca
                                                                                        1200
                                                                                        1260
agatgctttt ttättgctat atäaactagc ttggtctgtc tttgaactca catcaattag
                                                                                        1320
cttaagtttc cataagcaag tacaaatagc t
<210>
         49
<211>
<212>
         852
        DNA
<213>
        Unknown
<220>
<223>
        Description of Unknown Organism: CaMV 35S gene promoter
<400> 49
ccccagatta gccttttcaa tttcagaaag aatgctaacc cacagatggt tagagaggct
                                                                                           60
tacgcagcag gtctcatcaa gacgatctac ccgagcaata atctccagga aatcaaatac
                                                                                         120
cttčccaaga aggttaaaga tgcagtcaaa agattcagga ctaactgcat caagaacaca
gagaaagata tatttctcaa gatcagaagt actattccag tatggacgat tcaaggcttg
                                                                                         180
                                                                                         240
čticacaaac caaggcaagt aatagagatt ggagtctcta aaaaggtagt tcccactgaa
                                                                                         300
tcaaaggcca tggagtcaaa gattcaaata gaggacctaa cagaactcgc cgtaaagact
                                                                                         360
ggcgaacagt tcatacagag tctcttacga ctcaatgaca agaagaaaat cttcgtcaac
                                                                                         420
                                                                                         480
atgotogage acgacacact totetactee aaaaatatea aagatacagt etcagaagae
caaagggcaa ttgagacttt tcaacaaagg gtaatatccg gaaacctcct cggattccat
tgcccagcta tctgtcactt tattgtgaag atagtggaaa aggaaggtgg ctcctacaaa
                                                                                         540
                                                                                         600
tgctatagtt tggattaatg aaaggcatc gttgaagaa agganggsgg tcttacaa
tgccatcatt tggataaagg aaaggcatc gttgaaaaag cctctgcga cagtggtcc
aaagatggac cccaccac gaggagcatc gtggaaaaag aagacgttcc aaccacgtct
tcaaagcaag tggattgatg tgatattctc actgacgtaa gggatgacgc acaatcccac
                                                                                         660
                                                                                         780
tatccťtogo aagaccotto ototatataa ggaagttoat ttoatitgga gagaacaogg
                                                                                         840
gggactgtcg ag
                                                                                         852
```

```
<210>
           50
<211>
           1047
<212>
          DNA
<213>
          Artificial Sequence
<220>
<223> Synthetic antisense sequence
<400> 50
actagacqqt cqqcatctac tctattcctt tgccctcgga cgagtgctgg ggcgtcggtt
tccactatcg gcgagtactt ctacacagcc atcggtccag acggccgcgc ttctgcgggc
gatttgtgta cgcccgacag tcccggctcc ggatcggacg attgcgtcgc atcgaccctg
                                                                                                          180
cgcccaagct gcatcatcga aattgccgtc aaccaagctc tgatagagtt ggtcaagacc
                                                                                                          240
astroggac atatacyca ggagcygg cgatcytga agetcogat getrecett
gaagtageg gtetgfyet catacaage caaccaegge Ctcagaaga agtstegge
gactegat tgggaatec ggaactege ctcgetcaa tcaatgac get
gecattgte gtcaggacat tgtggage gaatecge tgacagagg gecggactg
ggggagte teggecaaa gcatcaget ateggage tgcgcgacga acgcatgae
                                                                                                          300
                                                                                                          360
                                                                                                          420
                                                                                                          480
                                                                                                          540
                                                                                                          600
ggtgtcgtcc atcacagttt gccagtgata cacatgggga tcagcaatcg cgcatatgaa
attacyctat gragigitati gaccgattic tigcggitcg aatgggccga acccgctcgt ctggctaaga toggccgcag cgategoate catagatcec gogaccggct gaagaacagc gggcagttcg gittcaggca ggtcttgcaa cgtgacaccc tgtgcacggc gggagatgca ataggtcagg ctctcgctga actacccaat gtcaagcact tccggaatcg ggaagccggc cgatgcaaag tgccgataaa cataacgaat tittgtagaaa cactaggca agctattac
                                                                                                          660
                                                                                                          720
                                                                                                          780
                                                                                                          840
                                                                                                          900
ccgcaggaca tatcaccgc ctcctacatc gaagctgaaa gcacggagatt cttcgccctc cgagagctgc atcaggtcgg agacgctgtc gaacttttcg atcagaaact tctcgacaga
                                                                                                          960
                                                                                                        1020
cotcocoot agttcaggct ttttcat
                                                                                                        1047
<210>
<211>
          67
<212>
          DNA
          Artificial Sequence
<213>
<220>
<223> Synthetic antisense sequence
<400>
aatgaagatc attttcgtat ttgctctcct tgctattgtt gcatgcaacg cttctgcacg
gttťgať
           52
<210>
<211>
           15
<212>
          DNA
<213>
          Artificial Sequence
<220>
<223>
          Synthetic antisense sequence
<400> 52
                                                                                                           15
atgaagatca ttttc
<210>
           53
<211>
          15
<212>
          DNA
<213>
          Artificial Sequence
<220>
<223>
          Synthetic control sequence
<400>
         53
                                                                                                           15
qqatcccqqq qtacc
<210> 54
```

<211> 1047

```
<212>
               DNA
 <213>
               Unknown
 <220>
<223>
               Description of Unknown Organism:hygromycin phosphotransferase
               gene
 <400>
              54
atgaaaaaqc ctgaactcac cgcgacgtct gtcgagaagt ttctgatcga aaagttcgac
 agogtotoog acotgatgoa gototoggag ggogaagaat otogtgottt cagottogat
gtaggagggc gtggatatgt cctgcgggta aatagctgcg ccgatggttt ctacaaagat
                                                                                                                                                        180
cgttatgttt atcggcactt tgcatcggcc gcgctcccga ttccggaagt gcttgacatt
                                                                                                                                                        240
ggggagttca gcgagagcct gacctattgc atctcccgcc gtgcacaggg tgtcacgttg
caagacctgc ctgaaaccga actgcccgct gttcttcagc cggtcgcgga ggtcatggat
                                                                                                                                                        300
                                                                                                                                                        360
campanetig typesate tagecagacy according typesates a syntaction of a company of the company of t
                                                                                                                                                        420
                                                                                                                                                        480
                                                                                                                                                        540
                                                                                                                                                        600
ctgatgcttt gggccgagga ctgccccgaa gtccggcacc tcgtgcacgc ggatttcggc
                                                                                                                                                        660
 tccaacaatg tcctgacgga caatggccgc ataacagcgg tcattgactg gagcgaggcg
atgttcgggg attcccaata cgaggtcgcc aacatcttct tctggaggcc gtggttggct
                                                                                                                                                        720
tgťatggagč agcagacgcg cťačťtegag eggaggcate eggageťťge aggategeeg
eggeteeggg egtatatget eegcattggt ettgaceaae tetateagag ettggttgae
                                                                                                                                                        780
                                                                                                                                                        840
                                                                                                                                                        900
ggcaattīcg aīgatgcāgc ttgggcgcāg ggtcgatgcg acgcaatcgī ccgāīccgga
gccgggactg tcgggcgtac acaaatcgcc cgcagaagcg cggccgtctg gaccgatggc
                                                                                                                                                        960
 tgtgtagaag tactcgccga tagtggaaac cgacgcccca gcactcgtcc gagggcaaag
                                                                                                                                                      1020
gaatagagta gatgccgacc gtctagt
                                                                                                                                                      1047
 <210>
 <211>
               265
 <212>
               DNA
 <213>
               Unknown
 <220>
 <223>
               Description of Unknown Organism: Nos terminator
 <400>
               55
                                                                                                                                                          60
gaatttcccc gatcgttcaa acatttggca ataaagtttc ttaagattga atcctgttgc
cggtcttgcg atgattatca tataatttct gttgaattac gttaagcatg taataattaa
cătgtaatgc atgacgttat ttatgagatg ggtttttatg attagagtcc cgcaattata
                                                                                                                                                        180
                                                                                                                                                        240
catītaatāc gcgatāgaaa acaaāatatā gcgcgcaaac taggātāaat tatcgcgcgc
                                                                                                                                                        265
ggtgtcatct atgttactag atcgg
 <210>
               56
               341
 <211>
 <212>
              PRT
 <213>
              Artificial Sequence
 <220>
 <223>
              Modified HPT synthetic sequence
 <400> 56
Met Lys Lys Pro Glu Leu Thr Ala Thr Ser Val Glu Lys Phe Leu Ile
Glu Lys Phe Asp Ser Val Ser Asp Leu Met Gln Leu Ser Glu Gly Glu
Glu Ser Arg Ala Phe Ser Phe Asp Val Gly Gly Arg Gly Tyr Val Leu
Arg Val Asn Ser Cys Ala Asp Gly Phe Tyr Lys Asp Arg Tyr Val Tyr
Arg His Phe Ala Ser Ala Āla Leu Pro Ile Pro Glu Val Leu Asp Ile
                                                                                        75
Gly Glu Phe Ser Glu Ser Leu Thr Tyr Cys Ile Ser Arg Arg Ala Gln
```

Gly val Thr Leu Gln Asp Leu Pro Glu Thr Glu Leu Pro Ala val Leu Gln Pro Val Ala Glu Val Met Asp Ala I le Ala Ala Ala Asp Leu Ser Ila Gln Thr Trp Arg Asp Phe Gly Pro Gln Gly Ile Gly Gln Tyr Thr Trp Arg Asp Phe Ile Cys Ala Ile Ala Ala Asp Pro His Val Tyr Ila Gly Gln Tyr Ila Gly Tyr Ila G

```
<210> 57
<211> 2158
<212> DNA
```

<213> Artificial Sequence

<220> <223> CAMV35S-Modified HPT-NOS synthetic sequence

```
<400> 57
ccccagatta gccttttcaa tttcagaaag aatgctaacc cacagatggt tagagaggct
tacgcagcag gtctcatcaa gacgatctac ccgagcaata atctccagga aatcaaatac
cttcccaaga aggttaaaga tgcagtcaaa agattcagga ctaactgcat caagaacaca
gagaaagata tättteteäa gäteägaagt ačtattečäg tatggačgat teaäggettg
cttcacaaac caaggcaagt aatagagatt ggagtctcta aaaaggtagt tcccactgaa
tcaaaggcca tggāgtcaāa gattcaāata gāggacctaa cagaāctcgc cgtaaagāct
ggcgaacagt tčatacagag tctcttacga čtčaatgaca agaagaaaat cttcgtčaac
atggtggagc acgacacact tgtctactcc aaaaatatca aagatacagt ctcagaagac
caaagggcaa ttgagacttt tcaacaaagg gtaatatccg gaaacctcct cggattccat
tgcccagcta tctgtcactt tattgtgaag atagtggaaa aggaaggtgg ctcctacaaa
tgccatcatt gcgataaagg aaaggccatc gttgaagatg cctctgccga cagtggtccc
aāagatggac ccccacccāc gaggāgcatc gtggaaāaag aagacgttcc aaccācgtct
tcaăagcăag tggattgatg tgătatctcc actgacgtaă gggatgacgc acaatcccac
tatccttcgc aagacccttc ctctatataa ggaagttcat ttcatttgga gagaacacgg
gggactgtcg agatgaaaaa gcctgaactc accgcgacgt ctgtcgagaa gtttctgatc
gaaaagtteg acagegtete egaeetgatg cagetetegg agggegaaga atetegtget
ttcagcttcg atgtaggagg gcgtggatat gtcctgcggg taaatagctg cgccgatggt
ttctacaaag atcgttatgt ttatcggcac tttgcatcgg ccgcgctccc gattccggaa
gtgcttgaca ttggggagit cagcgagagc ctgacctait gcatctcccg ccgtgcacag
ggtgtcacgt tgcaagacct gcctgaaacc gaactgcccg ctgttcttca gccggtcgcg
                                             Page 23
```

60

120

180

240 300

360

420 480

540 600

660

780

840 900

960

1020 1080

1140

```
591508035Seqlist.txt
gaggtcatgg atgcgatcgc tgcggccgat cttagccaga cgagcgggtt cggcccattc
                                                                                                                 1260
ggaccgcaag gaatcggtca atacactaca tggcgtgatt tcatatgcgc gattgctgat
                                                                                                                 1320
                                                                                                                 1380
ccccatgtgt atcactggca aactgtgatg gacgacaccg tcagtgcgtc cgtcgcgcag
gctctcgatg agctgatgct ttgggccgag gactgccccg aagtccggca cctcgtgcac
                                                                                                                 1440
gcggatťteg getecaacaa tgťeetgaeg gacaatggee geataacage ggteatťgae
tggagegagg egatgttegg ggatteecaa taegaggteg ecaacatett ettetggagg
                                                                                                                 1500
                                                                                                                 1560
ccgtggttgg cttgtatgga gcagcagacg cgctacttcg agcggaggca tccggagctt
                                                                                                                1620
gcaggatege egeggetecg ggcgtatatg etcegeattg gtettgacea actetateag
agettggttg acggcaattt egatgatgea gettgggege agggtegatg egacgcaate
                                                                                                                 1680
                                                                                                                 1740
                                                                                                                 1800
gtccgatccg gagccgggac tgtcgggcgt acacaaatcg cccgcagaag cgcggccgtc
tggaccgatg gctgtgtaga agtactcgc gatagtggaa accgacgccc cagcactcgt ccgagggcaa aggaatagag tagatgccga ccgtctagtg aatttccccg atcgttcaaa
                                                                                                                 1860
                                                                                                                 1920
ctyriggena takagittet taagattigaa teetitetee gitettigega tigattateat ataattitete tigaattaeg traageatga teetitigega tigattateat ataattitetig tigaattaeg tigaageatga taataattaac atgtaatgea tigaegitatt tatgaatgig gitittiatga tiagaagtee geaattataa attitaataeg egatagaaaa caaaatatag egegeaaact aggataaatt ategegege gigteateta tigitaeta
                                                                                                                 1980
                                                                                                                 2040
                                                                                                                 2100
                                                                                                                 2158
<210>
<211>
           1757
<212>
           DNA
<213>
           Artificial Sequence
<220>
<223> Synthetic promoter sequence
<400> 58
ctgatgatta ttttgttgat catgattttc ttttggctat ttgattttt gaaagatatt
                                                                                                                    60
tttttccctg ggaağacacc tatğggacga agatattatg tttcttatat agcaccaaac
aaatttaata tatatatata tatatatata tatatatata tatatatata tatatatata
                                                                                                                  180
                                                                                                                  240
tatatatata tatatatata tatatatata tatcacatca gtctctgcac aaagtgcatc
ctyggctgct tcaattataa agccccattc accacattty ctagatagtc gaaaagcacc
atcaatattg agcttcaggt attitttygtt tygttytggg tygattgatt ctaatatata
ccaaatcaat ataattcact accaaaatat accatagcca tcacaacttt attaattttg
                                                                                                                  300
                                                                                                                  360
                                                                                                                  420
gtagcttaag atggtatata taataaccaa ttaacaactg attctaattt tactacggcc
                                                                                                                  480
cagtatgtac caatacaaaa caacgagtat gttttcttcc atcgtaatcg tacacagtac
                                                                                                                  540
aaaaaaacct ggccagcctt tcttgggctg gggctctctt tcgaaaggtc acaaaacgta
cacggcagta acgccgcttc gctgcgtgtt aacggccacc aaccccgccg tgagcaaacg
                                                                                                                  600
                                                                                                                  660
gaatcagett tecacetect egatatete gegggeegt etggaaccog eccetticeg
trectitett tecacetetege gittigegtg tggggaegga eteceaaac eccetticeg
etectetett ettatitigt etatatete actgggeece accaacegea eccettiggee
                                                                                                                  720
                                                                                                                  780
                                                                                                                  840
cactcacgag tecececere eccaectata aataeeccae ecceteeig ectetreete
cactcaatega acccaaaat egeagagaaa aaaaaatete ecetegag gaagegetea
ategeettet caaggtaate gattitetga tecteteegt tectegegti tgattigatt
                                                                                                                  900
                                                                                                                  960
                                                                                                                 1020
tccčggcctg ttcgtgattg tgagatgttg tggttagtčt ccgttttgcg atctgtggta
                                                                                                                 1080
gatttgaaca ggtttagatg gggttcgcgt ggtatgctgg atctgtgatt atgagcgatg
                                                                                                                 1140
ctgttcgtgg rccaagtatt gattggttcg gatctagtag tagaactgtg ctagggttgt
gatctgttcc gatctgttca attagtagga tttagtctct gtttttctcg ttgatccast
tagcagcttc aggtatattt tgcttaggtt gtttttgatt cagtccctct agttgcatag
                                                                                                                 1200
                                                                                                                 1260
                                                                                                                 1320
atictactct giicatgttt aatctaaggg ctgcgtcttg ttgattagtg aitacatagc
                                                                                                                 1380
attictatict givatatitta attictasung telegitetig tigatiaging attacting
atagettica gipatatitta ettigettatig ettatettat caactigiteg acciptaant
teragicera gitataacet geettatigt etetegigat apisetagita gitatigaa
cagitegeg atggattit agiagiteaa agacetigea attatittig tigaacaegag
                                                                                                                 1440
                                                                                                                 1500
                                                                                                                 1560
cacggtgcgt ctctctattt tgttaggtca ctgttggtgt tgataggtac actgatgtta
                                                                                                                 1620
ttgfggttta ggtcgtgtat ctaacatatt ggaataattt gattgactga tttctgctgt
                                                                                                                 1680
actigotigg tättgitata atticatgit catagitgot gaccatgoti oggiaatigi
                                                                                                                 1740
                                                                                                                 1757
gtgtgcagat ctctaga
<210>
           59
<211>
           926
<212>
           DNA
```

Unknown

<223> Description of Unknown Organism:GUS gene partial fragment

```
<400>
                                                                                         60
gatatctacc cgcttcgcgt cggcatccgg tcagtggcag tgaagggcga acagttcctg
ăttaaccaca aăccgtťcťa cťťtactggč tttggťčgtč aťgaăgátgc ggačttacgť
ggcaaaggat tcgataacgt gctgatggtg cacgaccacg cattaatgga ctggattggg
gccaactcct accgtacctc gcattaccct tacgctgaag agatgctcga ctgggcagat
                                                                                        180
                                                                                        240
gaacatggca tcgtggtgat tgatgaaact gctgctgtcg gctttaacct ctctttaggc
                                                                                        300
attootitco aagcogocaa caagcogaaa gaactotaca gcgaagaggc agtcaacggg
                                                                                        360
                                                                                        420
qaaactcaqc aaqcqcactt acaqqcqatt aaaqaqctqa taqcqcqtqa caaaaaccac
480
                                                                                        540
                                                                                        600
                                                                                        660
                                                                                        720
                                                                                        780
                                                                                        840
                                                                                        900
                                                                                        926
ggcggtaaca agaaagggat cttcac
<210>
         60
<211>
         1198
<212>
         DNA
<213> Oryza sativa
<400> 60
cctctagctc atggcttgaa tgtgtgagaa tcatagatta tttatttcta atctataaca
tgatggčttt agtčtaačat gatčačcčta attctaatgc ggaattggat aatggacggt
gttttgttga cagacatgga gatgttgttg atgctatgaa tagtcgatag ttttaagttg
                                                                                        180
gttatťtaat ttggataťag actgacaaať gaťtataťtc ttctaattga ttaaatťcta
                                                                                        240
structure typestatus misseumi gattattigaa gaactigcag catgigggg
atatggttat actacgtgac atatattcat gagtggagtt cagagttitg gcttgtctcc
aggcatacat atacctaggc acaagtccag cycaaagca tacaaggaag atcataacaa
catgittccc citcicigga aaattitgit ggcaacagat gccticicct iciticagct
                                                                                        300
                                                                                        360
                                                                                        420
                                                                                        480
tctgcttctt tagtcagttt ggaggaagca gcaaatagtt gatgatatga gaatcctcta
                                                                                        540
catoggotag gigtaccaca ogacittatt attattatta itaitattat tattattita
                                                                                        600
caaaatataa atagatcagt ccctcaccaa caagtagagc aagttggtga gttattgtaa
                                                                                        660
agttctacaa agcĭaattĭa aaagttattg catĭaactĭa ttĭcaĭátĭa caaacaágag
tgtcaatgga acaatgaaaa ccatatgaca tactataatt ttgtttttat tattgaaatt
                                                                                        720
                                                                                        780
atataattoa aagagaataa atccacatag ccgtaaagtt ctacatgtgg tgcattacca
                                                                                        840
aaatatatat agčttacaaa acatgacaag cttagtttga aaaattgcaa tčcttatcac attgacacat aaagtgagtg atgagtcata atattattt tcttgctacc catcatgtat
                                                                                        900
                                                                                       960
atatgatagc cacaaagtta ctttgatgat gataccaaag aacatttta ggtgcaccta
                                                                                      1020
acagaatatc caaataatat gactcactta gatcataata gagcatcaag taaaactaac
                                                                                      1080
actčtaaagc aaccgatggg aaagcatcta taaatagaca agcacaatga aaatcctcat
                                                                                      1140
catcottcac cacaattcaa atattatagt tgaagcatag tagtagaatc caacaaca
                                                                                      1198
<210>
         61
<211>
         163
<212>
         DNA
<213>
        rice
<220>
<223> 10kDa prolamine terminator
<400> 61
                                                                                         60
tcaaacgttg gttacatgta ctctagtaat aaggtgttgc atactatcgt gtgcaaacac
tagaaataag aaccattgaa taaaatatca atcattttca gacttgcaaa tattgggtat
ttggatttct gtcccatgtc cctcttgaaa gccatgctgt aca
                                                                                        163
<210>
         62
<211>
         984
```

<212> DNA

591508035Seqlist.txt <213> Oryza sativa	
<pre><220> <223> GLUTELIN-A3 promoter</pre>	
<400> 62 agaagaaga taaataaccg aaactatttg gagagcattc aggttacatg gttagtccat ggtgctagat attgctatat aatactcaat gcaatgctca atagatataa gtttcaaagc tgtataagaa ttttaggtta gttgcaatg taagtgtagc ttcttatagc ttagtgctt actactctca caagcacatg ctatagatat gttccaagt gaagaataa ttcctttg ctaccaactt gcatgatatt atattgga atatcctatc tcttggctta taatgaaatg tgctgctggg ttatacctga ccatggatt tgagagacct tgtatagct gagacacacg tatatgcgag catggaacaa gagaacaaaa tgcaaggatt ttttatact ggttcatgcc cctggatagg tataacctgt gatcatcaaa aaagatatgc ataaataa agtaataaat ttgctcataa gaaaccaaaa ccaaagaca atatgtccta aacaaactgc attttgttg tcatgtagca atacaagaga taatatafag cgtggttatg acttattacc ttttgtgac tccaaaagt agtagfcta actgattgt taagtgatg tgctactcg agaagttcc tcccaaaagt agtagfcta actgattgt taagtgatg tgctactcgt agaagttct tcccaaaag aatcactaaa gcaacacaa actaatgc cacttgcac gaattcttt gtggaagata acaagaagc tcactgaaaa ataaaagca agaaaagga atcatattc tgtggaagata tcccattyatgt tcactgtaag ccattgatgt tcccattyatg acttgtagt ctattact tctact agtgagtca ttcattatgt ggacattaaca aactcatt tgtaactt tcgatcacta cttractca ctataaaagg ccattgatgtt agtcccaaaa accacaaag actactact acttaactaa tcataaaag ccattgatgtt agtcccacaa aaac acacacaataat atacacatt tcaaaaag ccattgatgtt agtcccacaa aacacacaa accacacaacaacaacaacaac	60 120 180 240 300 360 420 600 6600 720 780 840 900 980 984
<210> 63 <211> 30 <212> DNA <213> Artificial Sequence	
<220> <223> Synthetic antisense sequence	
<400> 63 atgaagatca ttttcgtatt tgctctcctt	30
<210> 64 <211> 45 <212> DNA <213> Artificial Sequence	
<220> <223> Synthetic antisense sequence	
<400> 64 atgaagatca ttttcgtatt tgctctcctt gctattgttg catgc	45
<210> 65 <211> 30 <212> DNA <213> Artificial Sequence	
<220> <223> Synthetic antisense sequence	
<400> 65 caaagttata gacaatatca actacaatcg	30
<210> 66 <211> 15 <212> DNA <213> Artificial Sequence	
<220>	

<223> Synthetic antisense sequence

```
<400> 66
gagttcgtaa ttcaa
                                                                                  15
<210> 67
<211> 45
<212> DNA
<213> Artificial Sequence
<220>
<223> Synthetic antisense sequence
<400> 67
gagttcgtaa ttcaacagca tagcatagtg gcaaccccct tctgg
                                                                                  45
<210> 68
<211> 45
<212> DNA
<213> Artificial Sequence
<223> Synthetic antisense sequence
<400> 68
caacaatctc actaccaggc cattagtagc gttcaggcga ttgtg
                                                                                  45
<210> 69
<211> 15
<212> DNA
<213> Artificial Sequence
<220>
<223> Synthetic antisense sequence
<400> 69
gctcaagctc aagct
                                                                                  15
<210> 70
<211> 30
<212> DNA
<213> Artificial Sequence
<220>
<223> Synthetic antisense sequence
<400> 70
tactttgatc agactcaagc tcaagctcaa
                                                                                  30
<210> 71
<211> 16
<212> DNA
<213> Artificial Sequence
<220>
<223> Synthetic antisense sequence
<400> 71
                                                                                  16
tgcagcagca gtgttg
<210> 72
<211> 23
<212> DNA
```

```
<213> Artificial Sequence
<220>
<223> Synthetic antisense sequence
<400> 72
tgcagcagca gtgttgccaa cag
                                                                                 23
<210> 73
<211> 22
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic antisense sequence
Met Lys Île Île Phe Val Phe Ala Leu Leu Ala Île Val Ala Cys Asn 1 5 10 15
Ala Ser Ala Arg Phe Asp
<210> 74
<211> 5
<212> PRT
<213> Artificial Sequence
<223> Synthetic antisense sequence
<400> 74
Met Lys Ile Ile Phe
<210> 75
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic antisense sequence
Met Lys Ile Ile Phe Val Phe Ala Leu Leu
<210> 76
<211> 14
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic antisense sequence
<400> 76
Met Lys Île Île Phe Val Phe Ala Leu Leu Ala Île Val Ala
<210> 77
```

```
<220>
<223> Synthetic antisense sequence
Gln Ser Tyr Arg Gln Tyr Gln Leu Gln Ser
<210> 78
<211> 5
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic antisense sequence
<400> 78
Glu Phe Val Arg Gln
<210> 79
<211> 15
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic antisense sequence
Glu Phe Val Arg Gln Gln His Ser Ile Val Ala Thr Pro Phe Trp
<210> 80
<211> 15
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic antisense sequence
Gln Gln Ser His Tyr Gln Ala Ile Ser Ser Val Gln Ala Ile Val
1 5 10 15
<210> 81
<211> 5
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic antisense sequence
<400> 81
Ala Gln Ala Gln Ala
<210> 82
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
```

<223> Synthetic antisense sequence

```
591508035Seqlist.txt
<400> 82
Tyr Phe Asp Gln Thr Gln Ala Gln Ala Gln
<210> 83
<211> 5
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic antisense sequence
<400> 83
Gln Gln Gln Cys Cys
<210> 84
<211> 7
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic antisense sequence
<400> 84
Gln Gln Gln Cys Cys Gln Gln
1
<210> 85
<211> 9
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic motif sequence
<400> 85
Glu Phe Val Arg Gln Gln Cys Ser Pro
<210> 86
<211> 11
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic motif sequence
Cys Gln Val Met Gln Gln Gln Cys Cys Gln Gln
<210> 87
<211> 6
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic motif sequence
<400> 87
```

Gln Gln Cys Cys Gln Gln

```
<210> 88
<211> 6
<212> PRT
<213> Artificial Sequence
<220>
<223> Synthetic motif sequence
<400> 88
Glu Phe Val Arg Gln Gln
<210> 89
<211> 144
<212> PRT
<213> Oryza sativa
<220>
<223> RM4
<400> 89
Met Lys Ile Ile Phe Val Phe Ala Leu Leu Ala Ile Ala Ala Cys Ser
1 5 10 15
Ala Ser Ala Gln Phe Asp Val Leu Gly Gln Ser Tyr Arg Gln Tyr Gln
20 25 30
Leu Gln Ser Pro Val Leu Leu Gln Gln Gln Val Leu Ser Pro Tyr Asn 35 40 45
Glu Phe Val Arg Gln Gln Tyr Gly Ile Ala Ala Ser Pro Phe Leu Gln 50 60
Ser Ala Ala Phe Gln Leu Gln Gln Leu Ala Leu Val Ala Gln Gln Ser 65 70 80
His Tyr Gln Asp Ile Asn Ile Val Gln Ala Ile Ala Gln Gln Leu Gln

85 90 95
Leu Gln Gln Phe Gly Asp Leu Tyr Phe Asp Arg Asn Leu Ala Gln Ala
100 105 110
Gln Ala Leu Leu Ala Phe Asn Val Pro Ser Arg Tyr Gly Ile Tyr Pro
115 120 125
Arg Tyr Tyr Gly Ala Pro Ser Thr Ile Thr Thr Leu Gly Gly Val Leu
130 135 140
<210>
<211> 156
<212> PRT
<213> Oryza sativa
<220>
<223> RM5
Met Lys Ile Ile Phe Val Phe Ala Leu Leu Ala Ile Val Ala Cys Asn
1 10 15
Ala Ser Ala Arg Phe Asp Ala Leu Ser Gin Ser Tyr Arg Gin Tyr Gin
20 25 30
Leu Gln Ser His Leu Leu Leu Gln Gln Gln Val Leu Ser Pro Cys Ser 35 40 45
Glu Phe Val Arg Gln Gln His Ser Ile Val Ala Thr Pro Phe Trp Gln 50 60
```

Pro Ala Thr Phe Gln Leu Ile Asn Asn Gln Val Met Gln Gln Gln Cys 65 Cys Gln Gln Leu Arg Leu Val Ala Gln Gln Ser His Tyr Gln Ala Ile 90 Ser Ser Val Gln Ala Ile Val Gln Gln Leu Gln Leu Gln Gln Val Gly

591508035Seqlist.txt 105 110

Val Val Tyr Phe Asp Gln Thr Gln Ala Gln Ala Gln Ala Leu Leu Ala 115 120 125

Leu Asn Leu Pro Ser Ile Cys Gly Ile Tyr Pro Asn Tyr Tyr Ile Ala 130 140

Pro Arg Ser Ile Pro Thr Val Gly Gly Val Trp Tyr 145 150 155

<210> 91 <211> 158 <212> PRT <213> Oryza sativa

<220> <223> RM7

<210> 92 <211> 134 <212> PRT <213> Oryza sativa

<220> <223> RM10

```
Ser Ser Cys Gly Cys Cys
    130
<210>
       93
<211>
       149
<212>
       PRT
<213> Oryza sativa
<220>
<223> RM16
<400> 93
Met Lys Ile Phe Val Ile Leu Ser Leu Leu Ala Leu Ala Ala Ser Ser
Ala Ser Ala Gln Phe Asp Ala Cys Thr Tyr Gly Gln Cys Gln Gln Gln
Pro Phe Met Gln Pro Ile Met Asn Pro Cys Asn Glu Phe Val Arg Gln
                              40
Gln Cys Ser Pro Met Ser Leu Pro Trp Lys Gln Ser Arg Arg Leu Gln 50 55 60
Leu Ser Ser Cys Gln Val Met Arg Gln Gln Cys Cys Gln Gln Met Arg
65 70 75 80
Leu Met Ala Gln Gln Tyr His Cys Gln Ala Ile Cys Thr Met Val Gln
Ser Ile Met Gln Gln Val Gln Phe Asp Ala Gly Phe Val Gly Glu Pro
             100
                                    105
Gln Ala Gln Āla Gln Ala Gln val Āla Leu Asn Leu Pro Ser Met Cys
                               120
Gly Val Tyr Pro Arg Tyr Cys Ser Thr Pro Cys Lys Val Ala Thr Gly
His Cys Gly Ser Trp
145
<210>
<211> 596
<212> DNA
<213> Oryza sativa
<220>
<223> RM4
<400> 94
gcaaaataga aagatctagt gtcccgcagc aatgaagatc attttcgtct ttgctctcct
                                                                               60
                                                                              120
łgctattgct gcatgcagcg cctctgcgca gttłgałgtt ttaggtcaaa gtłataggca
atatcagetg cagtegeetg teetgetaca geaacaggtg ettageecat ataatgagtt
                                                                              180
cgtaaggcag cagtatggca tagcggcaag cccttcttg caatcagctg cgtttcaact
                                                                              240
                                                                              300
gágaaácaac caágtcíggc aacagctcgc gctggtggcg caacaaíctc actatcagga
cattaacatt gttcaggcca tagcgcagca gctacaactc cagcagtttg gtgatctcta
ctttgatcgg aatctggctc aagctcaagc tctgttggct tttaacgtgc catctagata
                                                                              360
                                                                              420
tggtätctäc cctaggtact atggtgcacc cagtaccatt accacccttg gcggtgtctt
gtaatgagtt ttaacagtat agtggttcgg aagttaaaaa taagctcaga tatcatatat
                                                                              480
                                                                              540
gtgacatgtg aaactttggg tgatataaat agaaaaaaag ttgtctttca tattta
                                                                              596
<210>
<211> 597
<212>
       DNA
<213> Oryza sativa
<220>
<223> RM5
```

```
591508035Seqlist.txt
cqtatttqct ctccttqcta ttqttqcatq caacqcttct qcacqqtttq atqctcttaq
tčaaagtťat agacaaťatc aačtačaatč gcatčtcctg čtacágcaač aagtgctcag
cccatgcagt gagttcgtaa ggcaacagca tagcatagtg gcaaccccct tctggcaacc
                                                                                                   180
                                                                                                   240
agctacgttt caattgataa acaaccaagt catgcagcaa cagtgttgcc aacagctcag
                                                                                                   300
gčtggtagcg caacaatctc actaccaggc cattagtagc gttcaggcga ttgtgcagca
                                                                                                   360
actacagetg cagcaggteg gtgttgtčťa etttgáteag acteaagete aageteaage
tttgetggee ttaaacttge catecatatg tggtatetat ectaactaet acattgetee
                                                                                                   420
                                                                                                   480
gaggagcatt cccaccgttg gtggtgtctg gtactgaatt gtaatagtat aatggttcaa
                                                                                                   540
                                                                                                   597
atgitaaaaa taaagicatg catcatcatg cgtgacagit gaaaaaaaaa aaaaaaa
<210>
<211> 609
<212>
         DNA
<213> Orvza sativa
<220>
<223> RM7
<400> 96
gaagcatagt agtagaatcc aacaacaatg aagatcattt tcgtatttgc tctccttgct
attgttgcat gcaatcgctc tgcgcggttt gatcctctta gtcaaagtta taggcaatat
                                                                                                   120
caactacagt cgcatctcct actacagcaa caagtgctca gcccatgcag tgagttcgta
aggcaacagt atagcatagt ggcaaccccc ttctggcaac cagctacgtt tcaattgata
                                                                                                   180
                                                                                                   240
aacaaccaag tcatgcagca gcagtyttyc caacagetca ggctygtagc acaacaatct
cactaccagg ccattagtat tyttcaaggc attytycaac agctacaact gcagcaata
agtygtytct acttygatca gactcaagct caagcccaaa ctcytytgac cttcaactty
                                                                                                   300
                                                                                                   360
                                                                                                   420
ccatccatat gtggtatcta ccctaactac tatagtgctc ccaggagcat tgccactgtt
                                                                                                   480
ggtggtgtct ggtactgaat tgtaacaata taatagttcg tatgttaaaa ataaagtcat
acatcatcat gtgtgactgt tgaaacttag ggtcatataa atctaaataa aatcatctta
                                                                                                   540
                                                                                                   600
                                                                                                   609
cctaaaaaa
<210>
<211>
          1002
<212>
         DNA
<213> Oryza sativa
<220>
<223> intron sequence
<400> 97
tctagatcta agaatggtcc gtgccttaaa actttcccca accgtgctag tttatgttgt
gactgtctgc ctctctcagt ttacttggat gcattgacaa catcctttt tgctattact
cgtatttgct ctatagctgg tggcatatct catgttgaaa tttgcccttt taatccaaaa
                                                                                                   120
                                                                                                   180
                                                                                                   240
tiggatgiaa ttgaaagaai cciacgtggt agtiatitgg attitggtgt gaaaaaaaat
aggettigtta gaagaaggaa aattygatti agttaaaagg atactagatg fyftattig
gatttiggig caaacaaat taggaggtig gittiatica agttaaagt fyftiattig
aaatteteet aaaaagatag atactagatt tyeatatatg cattgaaaat tacatetteg
                                                                                                   300
                                                                                                   360
                                                                                                   420
cttggcggtt atactittag tccctctaaa ttgttcaatc atttatgatg aaaaggaaaa
                                                                                                   480
tcatīttāta tcacaaagtā tttatgatga aaggggaaaa atattcīgcā tgggītītgaa
                                                                                                   540
caaaatacgt ggattggtgt agccttaaca tacttgaaaa gggtatgatg ttgatgtagt
gcccacatgg tgtcgcttga cattaaaacg atatgcagtc aggattgagg aacattgctg
                                                                                                   600
                                                                                                   660
acaatttact atcgctgtct gtgttgacca caataattca gatgtaccat cctatcttct
                                                                                                   720
aactagaaag atgcatggaa gtttcttaca ttatttccag cacttgaaat tttagtgaaa
                                                                                                   780
tatcattaaa acataaccac ttactttgct gtgatatgaa ataaatgttt tatttcttgg
                                                                                                   840
aaagtggtat attcatatat tottacagta äätttatiga tittotitto atttattioi
                                                                                                   900
aaaittitaac cacccttttg gtagcttaag gaaaattgia tgtttgacag tcctgttttc
tgttgttca tccctccagg aaaaccagct actagtggat cc
                                                                                                   960
                                                                                                  1002
<210>
<211>
          37
```

<212> PRT <213> Oryza sativa

Page 34

```
591508035Seqlist.txt
<400> 98
Gln Val Met Gln Gln Gln Cys Cys Gln Gln Leu Arg Leu Val Ala Gln
                                      10
Gln Ser His Tyr Gln Ala Ile Ser Ser Val Gln Ala Ile Val Gln Gln 20 30
Leu Gln Leu Gln Gln
35
<210> 99
<211> 34
<212> PRT
<213> Oryza sativa
<400> 99
Met Lys Ile Ile Phe Val Phe Ala Leu Leu Ala Ile Val Ala Cys Asn
1 10 15
Ala Ser Ala Arg Phe Asp Ala Leu Ser Gln Ser Tyr Arg Gln Tyr Gln
Leu Gln
<210> 100
<211> 26
<212> PRT
<213> Oryza sativa
<400> 100
Glu Phe Val Arg Gln Gln His Ser Ile Val Ala Thr Pro Phe Trp Gln 10 15
Pro Ala Thr Phe Gln Leu Ile Asn Asn Gln
<210> 101
<211> 31
<212> PRT
<213> Oryza sativa
<400> 101
Tyr Phe Asp Gln Thr Gln Ala Gln Ala Gln Ala Leu Leu Ala Leu Asn
Leu Gln Ser Ile Cys Gly Ile Tyr Pro Asn Tyr Tyr Ile Ala Pro
<210> 102
<211> 111
<212> DNA
<213> Oryza sativa
<220>
<221> CDS
<222> (1)..(111)
<220>
<221> misc_feature
<222> (6)..(6)
<223> n is à, c, g, or t
<220>
<221> misc_feature
<222> (31)..(39)
```

<223> n is a, c, g, or t

<220>

```
<221> misc_feature
<222> (42)..(42)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<222> (45)..(45)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<222> (52)..(54)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<222> (66)..(66)
<223> n is a, c, g, or t
<220>
<220>
<221> misc_feature
<222> (70)..(75)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<222> (78)..(78)
<223> n is a, c, g, or t
<220>
<220>
<221> misc_feature
<222> (84)..(84)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<222> (90)..(90)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<222> (97)..(99)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<222> (103)..(105)
<223> n is a, c, g, or t
<400> 102
car gtn atg car car car tgy tgy car car nnn nnn nnn gtn gcn car
Gln Val Met Gln Gln Gln Cys Cys Gln Gln Xaa Xaa Xaa Val Ala Gln
                                                                                                                      48
car nnn cay tay car gcn atg nnn nnn gtn car gcn atg gtn car car
Gln Xaa His Tyr Gln Ala Met Xaa Xaa Val Gln Ala Met Val Gln Gln
                                                                                                                      96
nnn car nnn car car
                                                                                                                    111
Xaa Gln Xaa Gln Gln
             35
```

<210> 103

```
<211> 102
<212> DNA
<213> Oryza sativa
<220>
<221> CDS
<222> (1)..(102)
<220>
<221> misc_feature
<222> (18)..(18)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<221> (24)..(30)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<221> (33)..(33)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<222> (39)..(39)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<222> (42)..(42)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<222> (51)..(54)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<222> (57)..(60)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<222> (69)..(75)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<222> (79)..(81)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<222> (85)..(87)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<222> (97)..(99)
```

<223> n is a, c, g, or t

```
<400> 103
atg aar atg atg tty gtn tty gcn nnn nnn gcn atg gtn gcn tgy aay
Met Lys Met Met Phe Val Phe Ala Xaa Xaa Ala Met Val Ala Cys Asn
1 10 15
                                                                                                                            48
gcn nnn gcn nnn tty gay gcn nnn nnn car nnn tay nnn car tay car
Ala Xaa Ala Xaa Phe Asp Ala Xaa Xaa Gln Xaa Tyr Xaa Gln Tyr Gln
20 25 30
                                                                                                                             96
                                                                                                                           102
nnn car
Xaa Gln
<210> 104
<211> 78
<212> DNA
<213> Oryza sativa
<220>
<221> CDS
<222> (1)..(78)
<220>
<221> misc_feature
<222> (9)..(12)
<223> n is a, c, g, or t
<220>
<220>
<221> misc_feature
<222> (22)..(24)
<223> n is a, c, g, or t
<220>
<220>
<221> misc_feature
<222> (30)..(30)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<222> (33)..(33)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<222> (36)..(36)
<223> n is a, c, g, or t
<220>
<220>
<221> misc_feature
<222> (39)..(39)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<222> (51)..(51)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<222> (54)..(54)
<223> n is a, c, g, or t
```

Page 38

<220>

<221> misc_feature

```
<222> (57)..(57)
<223> n is a, c, g, or t
<220>
<221> misc_feature
<222>
       (64)..(66)
<223>
       n is a, c, g, or t
<400> 104
                                                                                   48
gar tty gtm nnn car car cay nnn atg gtm gcm acn ccn tty tgg car
Ğlu Phé Val Xaa Gln Gln Hiś Xaa Met Val Ăla Thr Pro Phé Trp Gln
ccn gcn acn tty car nnn atg aay aav car
                                                                                   78
Pro Ala Thr Phé Gln Xaa Met Asn Asn Gln
<210>
        105
<211> 93
<212>
       DNA
<213> Oryza sativa
<220>
<221>
<222>
        CDS
        (1)..(93)
<400> 105
tac ttt gat cag act caa gct caa gct caa gct ttg ctg gcc tta aac
Tyr Phe Asp Gln Thr Gln Ala Gln Ala Gln Ala Leu Leu Ala Leu Asn
                                                                                   48
ttg caa tcc ata tgt ggt atc tat cct aac tac tac att gct ccg
Leu Gln Ser Ile Cys Gly Ile Tyr Pro Asn Tyr Tyr Ile Ala Pro
                                                                                   93
<210>
        106
<211>
       1426
<212> DNA
<213> Oryza sativa
<400> 106
ttagcattaa tatttataga gtgataaagt catactacaa taaatcctta tatattaatt
gggggtcata ctagaagccc catattaatc ctacgagagg tagaaaacta gaaattatcg
                                                                                  120
                                                                                  180
cactagtcaa gttgcacttg gcctagagtc tcaattgtag tataaatgat ataataattc
taaaattaaa attagcaaat aacaagttca attaggtttg aagccgtaat tctattttta
                                                                                  240
taatttaatc attottaaat ttagaattac taaaaaataa ttattaatac agogttgtac
                                                                                  300
                                                                                  360
ttgctgtaga gactcatata gttīttacga cgatttaata atttcaaaaa tāaātacagg
aaattgctaa gtttgtaatc taaaatataa tattgtcata atataataat tctaaaattc
                                                                                  420
aaattaataa ataccaagtt gatgttttat ttaaaatata tagtatgtgc cgcacagctt
                                                                                  480
gatgcttagt ctagatcřít čaačcgtgct acgctgggtt aařtagčgát gğigcaggtc
acgtacccaa atticticac tgitggatca actagagtag ttaaacgagg gcatgigatg
aaggctagct attigaaatt ticcaattat ccctgcataa gicaggctac aatagcacct
                                                                                  540
                                                                                  600
ggactacatg cagggattac aaaataggtg gtaaccacat ttaccgcgtt aaccctatca
aattcaaata aattttaaaa gtaatttgat ttttttaata aattttgtat ggtttctcaa
                                                                                  780
gctttatttt ggttaccgtg čttactgccg gaggcaatgg gaaaccctca čtagaagttg
                                                                                  840
                                                                                  900
cacctgttct tgtctgtgca ccatatcatg ttgaatcatg tgcgttgtgt cctttcggaa
gaaccgattt actacatgac tcatcaattc cactttacgt atcaaaaggt ttgttatggg
                                                                                  960
ggcaatgett ttgtgaaatt aaatttttat tttgegteae gttgtateta gttaaaeaet
                                                                                 1020
acctacctac cattacaaaa cctcattcca caaaacgatg catctagata aaaaatatga
                                                                                 1080
catgtaaagt gagtaatgac tcatgtttat tatcaaaaat cgataacaat caaatgatat
                                                                                 1140
aggtagtaaa gtacctttga aatggcatgt ccaagtatgt gtagctccac ctagcacaat
                                                                                 1200
atcccaagtg atcatcataa aaggcataca aatacaagca gccgatgatg cacacaagaa
                                                                                 1260
acaacacaaa ttgcacaaaa ccaaaagcaa ccgatgcctt gagcatagag atcatgctat
                                                                                 1320
                                             Page 39
```

```
591508035Seqlist.txt
tcccactata aatacaaatg caccatatca agatgctcct cacccttact gaaaaatcac
                                                                                            1380
aaacatcaaa acgttataag agttctctag catccatcac atagcc
                                                                                            1426
<210>
         107
<211>
         1008
<212>
         DNA
<213> Oryza sativa
<400> 107
gcccccgcc ggacctcccg tgcccgtggc gcctggaggg aggagagggg agagatggtg
agagaggagg aagaagagga ggggtgacaa tgatatgtgg gccatgtggc ccccaccatt
ttttaattca ttctttgtt gaaactgaca tgtgggtccc atgagaatta ttatttttcg
                                                                                              180
gatcgaattg ccacgtaagc gctacgtcaa tgctacgtca gatgaagacc gagtcaaatt
                                                                                              240
agccacgtaa gcgccacgtc agccaaaacc accatccaaa ccgccgaggg acctcatctg
cactggtttt gatagttgag ggacccgttg tatctggttt ttcgattgaa ggacgaaaat
                                                                                              300
                                                                                              360
caaatttytt gacaagttaa gggaccttaa atgaacttat tccatttcaa aatattctyt
gagccatata tccgtgggct tccaatcctc ctcaaattaa agggcctttt taaaatagat
                                                                                              420
                                                                                              480
aattgccttc tttcagtcac ccataaaagt acaaaactac taccaacaag caacatgcgc
                                                                                              540
                                                                                              600
agttacacac attttctqca catttccacc acqtcacaaa qaqctaaqaq ttatccctaq
                                                                                              660
gacaatctca ttagtgtaga tacatccatt aatcttttat cagaggcaaa cgtaaagccg
                                                                                              720
ctctttatga caaaaatagg tgacacaaaa gtgttatctg ccacatacat aacttcagaa
attacccaac accaagagaa aaataaaaaa aaatcttttt gcaagctcca aatcttggaa acctttttca ctctttgcag cattgtactc ttgctctttt tccaaccgat ccatgtcacc
                                                                                              780
                                                                                             840
ctcaagcttc tacttgatct acacgaagct caccgtgcac acaaccatgg ccacaaaaac
cctataaaac cccatccgat cgccatcatc tcatcatcag ttcatcacca acaaacaaaa
                                                                                             900
                                                                                             960
gaggaaaaaa aacatataca cttctagtga ttgtctgatt gatcatca
                                                                                            1008
<210> 108
<211> 72
<212> DNA
<213> Oryza sativa
<220>
<221> CDS
<222> (1)..(72)
<400> 108
atg gca gca tac acc agc aag atc ttt gcc ctg ttt gcc tta att gct
Met Ala Ala Tyr Thr Ser Lys Ile Phe Ala Leu Phe Ala Leu Ile Ala
                                                                                               48
ctt tct gca agt gcc act act gca
Leu Ser Ala Ser Ala Thr Thr Ala
20
                                                                                               72
<210> 109
<211> 24
<212> PRT
<213> Oryza sativa
<400> 109
Met Ala Ala Tyr Thr Ser Lys Ile Phe Ala Leu Phe Ala Leu Ile Ala
Leu Ser Ala Ser Ala Thr Thr Ala
<210>
         110
<211>
         66
<212>
         DNA
<213> Oryza sativa
<220>
<221> CDS
```

```
<222> (1)..(66)
<400> 110
<40U> 110
atg aag atc att ttc gta ttt gct ctc ctt gct att gtt gca tgc aat
Met Lys Ile Ile Phe Val Phe Ala Leu Leu Ala Ile Val Ala Cys Asn
1 5
                                                                                                     48
gct tct gca cgg ttt gat
Ala Ser Ala Arg Phe Asp
20
                                                                                                     66
<210> 111
<211> 22
<212> PRT
<213> Oryza sativa
<400> 111
Met Lys Ile Ile Phe Val Phe Ala Leu Leu Ala Ile Val Ala Cys Asn
                                                    10
Ala Ser Ala Arg Phe Asp
                 20
<210> 112
<211> 57
<212> DNA
<213> Oryza sativa
<220>
<221> CDS
<222> (1)..(57)
<400> 112
atg aag atc ttt gtc atc ctc tct ctc ctc gcc ctc gca gcg agc agc
Met Lys Ile Phe Val Ile Leu Ser Leu Leu Ala Leu Ala Ala Ser Ser
                                                                                                     48
gcc tcg gca
Ala Ser Ala
                                                                                                     57
<210> 113
<211> 19
<212> PRT
<213> Oryza sativa
<400> 113
Met Lys Ile Phe Val Ile Leu Ser Leu Leu Ala Leu Ala Ala Ser Ser
Ala Ser Ala
<210> 114
<211> 72
<212> DNA
<213> Oryza sativa
<220>
<221> CDS
<222> (1)..(72)
<400> 114
atg gcg agt tcc gtt ttc tct cgg ttt tct ata tac ttt tgt gtt ctt
Met Ala Ser Ser val Phe Ser Arg Phe Ser Ile Tyr Phe Cys val Leu
                                                                                                     48
```

```
591508035Seqlist.txt
                                                                                        72
cta tta tgc cat ggt tct atg gcc
Leu Leu Cys His Gly Ser Met Ala
               20
<210>
        115
<211> 24
<212> PRT
<213> Oryza sativa
<400> 115
Met Ala Ser Ser Val Phe Ser Arg Phe Ser Ile Tyr Phe Cys Val Leu
Leu Leu Cys His Gly Ser Met Ala
               20
<210> 116
<211> 66
<212> DNA
<213> Oryza sativa
<220>
<221> CDS
<222> (1)..(66)
<400> 116
atg gct agc aag gtc gtc ttc ttc gcg gcg gcg ctc atg gcg gcc atg
Met Ala Ser Lys Val Val Phe Phe Ala Ala Ala Leu Met Ala Ala Met
                                                                                        48
                                                                                        66
gtg gcc atc tcc ggc gcg
Val Ala Ile Ser Gly Ala
20
<210> 117
<211> 22
<212> PRT
<213> Oryza sativa
<400> 117
Met Ala Ser Lys Val Val Phe Phe Ala Ala Ala Leu Met Ala Ala Met
                                             10
Val Ala Ile Ser Gly Ala
<210> 118
<211> 8
<212> PRT
<213> Oryza sativa
<400> 118
Ser Arg Ala Met Val Ser Leu Gly
<210> 119
<211> 102
<212> DNA
<213> recombinant construct
<400> 119
                                                                                          60
atggcagcat acaccagcaa gatctttgcc ctgtttgcct taattgctct ttctgcaagt
gccactactg catctagagc aatggtgagc aagggcgagg ag
                                                                                        102
```